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On the cover

Why France's election will have consequences far beyond its borders: leader, page 7. Resurgent French populism reflects a new social faultline, pages 15-17

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5 The world this week

Leaders

- 7 **The French presidency**
France's next revolution
- 8 **Nigeria's sick president**
Get well soon, Mr Buhari
- 8 **Red tape in America**
Doing deregulation right
- 9 **Indian banks**
From worse to bad
- 10 **Deportation**
Oiling the machine

Letters

- 12 **On companies, bubbles, Scotland, banking, Alabama, the green belt, time**

Briefing

- 15 **French politics**
Fractured

Asia

- 19 **Philippine politics**
Death and taxes
- 20 **North Korean assassination**
VX marks the spot
- 20 **Donald Trump and Afghanistan**
A bitter stalemate
- 21 **The politics of language in Sri Lanka**
Crossed in translation
- 22 **An ultranationalist kindergarten**
School of shock

China

- 23 **Hong Kong's leadership race**
The Communist Party's pick
- 24 **Anti-smog activism**
Choking with fury
- 25 **Banyan**
Xi: the constrained dictator

United States

- 26 **Regulation**
Grudges and kludges
- 28 **The budget**
Ten-penny plan
- 29 **Nuclear weapons**
Assured destruction
- 29 **Anti-Semitism**
Past and present
- 30 **Los Angeles**
Dense as in smart
- 31 **Lexington**
Leading v cheerleading

The Americas

- 32 **Canada's Conservatives**
Choosing a leader
- 33 **Peru's disappeared**
Unearthing the past
- 33 **Corruption in Mexico**
The backhand bus
- 34 **Bello**
How to pay for elections

Middle East and Africa

- 35 **Nigeria**
A nation holds its breath
- 36 **Water in Africa**
Pay as you drink
- 36 **South Africa**
Hail to the chiefs
- 37 **Rwanda**
If you build it, they may not come
- 37 **Saudi Arabia**
The destruction of Mecca
- 38 **Syria's rebel police**
Truncheons at a gunfight

Europe

- 39 **Italy's Five Star Movement**
A tale of two mayors
- 40 **German defence**
Eine deutsche Atombombe?
- 40 **Russian riddles**
Whispers from the Kremlin
- 41 **Populism and social media**
Twitter harvest
- 42 **Charlemagne**
The European Court of Justice



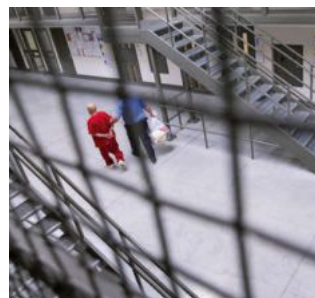
Trump's war on red tape

America needs regulatory reform, not a crude cull of environmental rules: leader, page 8. Too much federal regulation has piled up in America. Fixing the problem requires better institutions, page 26



Nigeria's sick president

Muhammadu Buhari has been ill for six weeks. Nigerians deserve to know more about what ails him and when he will return: leader, page 8. The country still needs governing, page 35



Deportation Germany's efforts to deport more unauthorised immigrants are sensible. Not so America's: leader, page 10. Removing those who fall foul of immigration rules is difficult and expensive. But rich countries are trying ever harder, pages 46-48



India's banks The troubled financial system needs cleaning up. A bad bank would be a start—but only that: leader, page 9. Can India continue to grow if both its banks and companies are ailing? Page 57



Britain's puny companies The world's most open market for takeovers is having second thoughts: Schumpeter, page 56



Data, apps and health care Digitising the health-care industry is one of the great business opportunities of recent times, page 50

Britain

- 43 **The NHS and social care**
Paying for grandpa
- 44 **The Tories and their opponents**
Monarch of all she surveys
- 45 **Bagehot**
Brexit and Gibraltar

International

- 46 **Deportation**
Exit strategies

Business

- 50 **Health care**
The wonder drug
- 52 **Mobile phones**
The new old thing
- 52 **The woes of Uber's boss**
Road rage
- 53 **Samsung**
Group sacrifice
- 53 **Cargo shipping**
Still at sea
- 54 **Business in Rwanda**
Party of business
- 55 **A Nigerian oil deal**
Eni questions
- 56 **Schumpeter**
The British experiment

Finance and economics

- 57 **India's economy**
Off balance
- 58 **Buttonwood**
Money illusion
- 59 **The LSE and Deutsche Börse**
No deal?
- 59 **American trade policy**
Action plan
- 60 **Currency manipulation**
Not who you think
- 61 **Moral hazard**
Taken for a ride
- 61 **Private-equity deals**
Poised to pounce
- 62 **Free exchange**
Kenneth Arrow

Science and technology

- 63 **Palaeontology**
The living was easy
- 64 **Lunar spaceflight**
Fly who to the Moon?
- 64 **Artificial intelligence**
Neighbourhood watch
- 65 **Finding new antibiotics**
The uses of dragon's blood
- 66 **Electronics**
One chip to rule them all

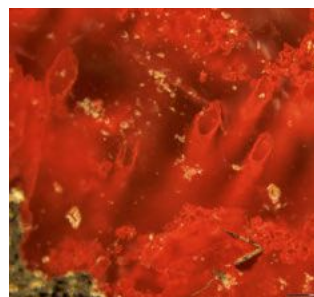
Books and arts

- 67 **Violence and inequality**
The greater leveller
- 68 **Wall Street**
Stevie wonder
- 68 **Norse mythology**
Of gods and heroes
- 69 **Johnson**
Why words die
- 70 **New fiction**
Lutz Seiler's "Kruso"
- 70 **The Academy Awards**
The gleam of "Moonlight"

- 72 **Economic and financial indicators**
Statistics on 42 economies, plus a closer look at purchasing managers' indexes

Obituary

- 74 **Stanley Bard**
Up in the old hotel



The origins of life A new fossil, if confirmed, suggests life got started quickly on the ancient Earth, page 63

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Rue de l'Athénée 32
1206 Geneva, Switzerland
Tel: +41 22 566 2470

750 3rd Avenue, 5th Floor, New York, NY 10017
Tel: +1 212 541 0500

1301 Cityplaza Four,
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Politics



François Fillon, the Republican candidate in **France's** presidential election, declared that he will continue his campaign despite being subject to an official criminal investigation over payments he made to his wife and children. Mr Fillon said he had been unfairly singled out by magistrates and implied that the investigation was politically motivated. François Hollande, France's president, criticised Mr Fillon for questioning the impartiality of the justice system.

Jean-Claude Juncker, the president of the **European Commission**, proposed that the European Union pull back from some activities that could be better handled locally by members, such as social policy. He also called for tighter EU integration on key policies such as migration, defence and trade.

Two German men were convicted of murder for staging an illegal drag race in the heart of **Berlin's** central shopping district in February 2016, killing a 69-year-old pensioner. The judges ruled that the drag racers' extraordinary carelessness was grounds for a verdict of murder rather than manslaughter.

In **Britain**, two by-elections in seats held by the Labour Party highlighted its directionless leadership under Jeremy Corbyn. It lost Copeland, which it had held since 1935, handing the Conservatives the first gain at a by-election for a governing party since 1982. It also lost ground in the safer seat of Stoke. Labour is trailing behind the government in

polls by nearly 20 points and Mr Corbyn's personal ratings are on the floor.

The British government suffered its first defeat in Parliament on the **Brexit** bill, which will allow it to trigger the legal means for leaving the EU. The House of Lords amended the bill in an effort to secure the rights of EU nationals living in Britain. Brexiters point out that Brussels has failed to give similar guarantees for Britons living in the EU. The Lords told MPs to search "their consciences" as it voted 358 to 256 for the amendment, which is likely to be removed when the bill returns to the Commons.

On the attack



The **Iraqi** government's assault on the remaining Islamic State presence in west Mosul continued, with the government taking control of the city's airport and one of the bridges over the Tigris river. It also cut the last road out of west Mosul, preventing fresh supplies from reaching the Islamists.

China and Russia once again vetoed an attempt by the UN Security Council to sanction **Syria** for its use of chemical weapons in 2014 and 2015.

Mending fences

China's most senior diplomat, Yang Jiechi, met Donald Trump in the White House. They discussed a possible meeting between Mr Trump and his Chinese counterpart, Xi Jinping. No date has been set, but both countries agreed that they should meet regularly. Ties between the pair have been strained over a number of issues, including trade and military activity in East Asia.

Three people secured enough nominations to join the race for the post of chief executive of **Hong Kong**. The front-runner is Carrie Lam, who until recently was head of the territory's civil service. Her main rival is expected to be John Tsang, a former financial secretary. Also running is Woo Kwok-hing, a former judge. The winner will be chosen on March 26th by a committee stacked with supporters of the government in Beijing.

China responded angrily to a decision by Lotte, a South Korean conglomerate, to provide land near Seoul for the installation of an American **anti-missile system**. America says the system is needed to protect the South against North Korean attacks. China fears it would make Chinese missiles less scary, too.

Police in the **Philippines** arrested Leila de Lima, a senator who is one of the most vocal critics of the president, Rodrigo Duterte. The police say Ms de Lima took bribes from drug-traffickers; Ms de Lima says she is a political prisoner.

Bangladesh softened a law intended to reduce child marriage, allowing girls under the age of 18 to marry in certain circumstances, as huge numbers already do.

Malaysia announced that the poison used to kill the half-brother of Kim Jong Un, the North Korean dictator, was vx, an extremely toxic nerve agent. It charged two women involved in the attack, which took place at Kuala Lumpur airport, with murder. They say they thought they were taking part in a prank.

How to be presidential Donald Trump gave his first speech to Congress. In a departure from the shrillness that has characterised his presidency so far, a composed Mr Trump gave a solemn address, though the themes of cracking down on illegal immigration, overturning Obamacare and erecting trade barriers sounded familiar. He also

pledged his full support for NATO, having previously questioned the value of the military alliance.

It emerged that **Jeff Sessions**, the new attorney-general, had held conversations with the Russian ambassador last year, contradicting his testimony to Congress during his confirmation hearing that he had not contacted Russian officials. As head of the Justice Department, Mr Sessions has ultimate oversight over an investigation into Russian interference in the election. Nancy Pelosi, the Democrats' leader in the House, called for him to resign.

Thomas Perez was elected chairman of the **Democratic National Committee**, a relief for the party's establishment. Mr Perez was Barack Obama's secretary of labour and is the first Hispanic person to head the DNC. He beat Keith Ellison, the left's favourite.

The deluge

Storms in the Andes pushed mud and debris into the rivers that supply Santiago, **Chile's** capital, with water. Around 4m people were cut off from running water. At least three people died and 19 went missing during the storms, which struck the country during a normally dry season.



Gustavito, a much-loved hippopotamus in **El Salvador's** national zoo (pictured above in happier times), died after an apparent beating. Investigators have not found the culprits, who sneaked into the zoo and hit the animal with blunt and sharp objects. El Salvador has one of the world's highest murder rates, but Salvadoreans were especially shocked by this killing. ►►

Business

The proposed merger of the **London Stock Exchange** and **Deutsche Börse** seemed headed for collapse. The final nail in the coffin was said to be the LSE's rejection of an ultimatum from European anti-trust regulators for it to sell its stake in a bond-trading platform in Italy. The LSE reportedly rejected the demand without consulting its intended German partner. The British and German exchanges announced their intention to merge a year ago, before Britain voted to leave the EU.

Prosecutors in South Korea charged **Lee Jae-yong**, the de facto head of Samsung, and four other executives with bribery and corruption following a lengthy investigation. Mr Lee is accused of directing \$38m in bribes to an associate of the country's president in order to smooth the merger of two Samsung affiliates. He denies wrongdoing.

OneWeb, a startup that plans to launch a constellation of small satellites that will provide internet connection to remote places, is to merge with **Intelsat**, one of the biggest operators of commercial satellites. The deal is backed by SoftBank, a technology group, which has invested in OneWeb. The transaction relies on some bondholders in Intelsat agreeing to a debt swap, which should bring its \$15bn debt load into a lower orbit.

A bigger bite

Warren Buffett revealed that Berkshire Hathaway, his investment company, had more than doubled the number of shares it owns in **Apple**, giving it a stake worth around \$18 billion. Apple is now one of Berkshire's biggest equity holdings.

India's economy grew by 7% in the last quarter of 2016 compared with the same period of 2015. That was a more robust figure than economists had expected, given the government's surprise deci-

sion in November to withdraw 86% of the banknotes in circulation in an effort to curb corruption and counterfeiting. Demonetisation led to long queues at shops and banks and disrupted businesses.



A slump in oil prices and revenues caused **Nigeria's economy** to shrink in 2016 for the first time in 25 years. GDP contracted by 1.5% as oil production tumbled. A shortage of dollars, used by many businesses to pay for imports, also contributed to the slowdown. The IMF forecasts that the economy will grow by 0.8% this year and 2.3% in 2018.

Stockmarkets reached new record highs, buoyed in part by a positive reaction to Donald Trump's speech to Congress. The Dow Jones Industrial Average index closed above the 21,000 mark, a little over a month after it breached

20,000. The S&P 500 and NASDAQ indices also scaled new heights.

Noble Group reported a small profit of \$8.7m for last year. Noble was once Asia's biggest commodities-trading firm, until it was hit by a double whammy of plunging commodity prices and questions about its accounts (until a review found they conformed to industry standards).

A knight to the rescue

In Britain, **Sir Philip Green** reached a settlement with regulators to top up the insolvent pension fund for workers at BHS, a bankrupt retail chain that he once owned. The collapse of BHS revealed a huge shortfall in its pension scheme; an inquiry in Parliament described the episode as "the unacceptable face of capitalism".

Travis Kalanick issued a mea culpa. The chief executive of **Uber** admitted that "I need leadership help" after video footage emerged of him launching a verbal tirade at an Uber driver who had criticised the ride-hailing app's business model. It is another dent in Uber's image; it also faces allegations of sexual harassment from a former employee.

Snapchat priced its IPO at \$17 a share, above the price range it set out in its prospectus. Demand was strong for the most eagerly awaited stock-market flotation from a tech company in years.

Elon Musk, the founder of **SpaceX**, said he intends to fly people around the Moon by the end of next year. Two wealthy space tourists have apparently volunteered for the return flight, which would take a week and be controlled by autopilot. But the brave adventurers may not want to pack just yet. The Falcon Heavy rocket needed to launch the Moon capsule has not yet come into operation.

Thanks for the memories

Penguin Random House won an auction for the rights to publish the **memoirs** of Barack and Michelle Obama. Although the rights were sold jointly the memoirs of the former president and first lady will be published as separate books. The \$65m that Penguin is reportedly paying is well above the \$15m that Bill Clinton got for his memoirs and the \$10m that George W. Bush obtained for his.

Other economic data and news can be found on pages 72-73



France's next revolution

Why the French presidential election will have consequences far beyond its borders



IT HAS been many years since France last had a revolution, or even a serious attempt at reform. Stagnation, both political and economic, has been the hallmark of a country where little has changed for decades, even as power has rotated between the established parties of left and right.

Until now. This year's presidential election, the most exciting in living memory, promises an upheaval. The Socialist and Republican parties, which have held power since the founding of the Fifth Republic in 1958, could be eliminated in the first round of a presidential ballot on April 23rd. French voters may face a choice between two insurgent candidates: Marine Le Pen, the charismatic leader of the National Front, and Emmanuel Macron, the upstart leader of a liberal movement, *En Marche!* (On the Move!), which he founded only last year.

The implications of these insurgencies are hard to exaggerate. They are the clearest example yet of a global trend: that the old divide between left and right is growing less important than a new one between open and closed. The resulting realignment will have reverberations far beyond France's borders. It could revitalise the European Union, or wreck it.

Les misérables

The revolution's proximate cause is voters' fury at the uselessness and self-dealing of their ruling class. The Socialist president, François Hollande, is so unpopular that he is not running for re-election. The established opposition, the centre-right Republican party, saw its chances sink on March 1st when its standard-bearer, François Fillon, revealed that he was being formally investigated for paying his wife and children nearly €1m (\$1.05m) of public money for allegedly fake jobs. Mr Fillon did not withdraw from the race, despite having promised to do so. But his chances of winning are dramatically weakened.

Further fuelling voters' anger is their anguish at the state of France (see pages 15-17). One poll last year found that French people are the most pessimistic on Earth, with 81% grumbling that the world is getting worse and only 3% saying that it is getting better. Much of that gloom is economic. France's economy has long been sluggish; its vast state, which absorbs 57% of GDP, has sapped the country's vitality. A quarter of French youths are unemployed. Of those who have jobs, few can find permanent ones of the sort their parents enjoyed. In the face of high taxes and heavy regulation those with entrepreneurial vim have long headed abroad, often to London. But the malaise goes well beyond stagnant living standards. Repeated terrorist attacks have jangled nerves, forced citizens to live under a state of emergency and exposed deep cultural rifts in the country with Europe's largest Muslim community.

Many of these problems have built up over decades, but neither the left nor the right has been able to get to grips with them. France's last serious attempt at ambitious economic reform, an overhaul of pensions and social security, was in the mid-1990s under President Jacques Chirac. It collapsed in the

face of massive strikes. Since then, few have even tried. Nicolas Sarkozy talked a big game, but his reform agenda was felled by the financial crisis of 2007-08. Mr Hollande had a disastrous start, introducing a 75% top tax rate. He was then too unpopular to get much done. After decades of stasis, it is hardly surprising that French voters want to throw the bums out.

Both Mr Macron and Ms Le Pen tap into that frustration. But they offer radically different diagnoses of what ails France and radically different remedies. Ms Le Pen blames outside forces and promises to protect voters with a combination of more barriers and greater social welfare. She has effectively distanced herself from her party's anti-Semitic past (even evicting her father from the party he founded), but she appeals to those who want to shut out the rest of the world. She decries globalisation as a threat to French jobs and Islamists as fomenters of terror who make it perilous to wear a short skirt in public. The EU is "an anti-democratic monster". She vows to close radical mosques, stanch the flow of immigrants to a trickle, obstruct foreign trade, swap the euro for a resurrected French franc and call a referendum on leaving the EU.

Mr Macron's instincts are the opposite. He thinks that more openness would make France stronger. He is staunchly pro-trade, pro-competition, pro-immigration and pro-EU. He embraces cultural change and technological disruption. He thinks the way to get more French people working is to reduce cumbersome labour protections, not add to them. Though he has long been short on precise policies (he was due to publish a manifesto as *The Economist* went to press), Mr Macron is pitching himself as the pro-globalisation revolutionary.

Look carefully, and neither insurgent is a convincing outsider. Ms Le Pen has spent her life in politics; her success has been to make a hitherto extremist party socially acceptable. Mr Macron was Mr Hollande's economy minister. His liberalising programme will probably be less bold than that of the beleaguered Mr Fillon, who has promised to trim the state payroll by 500,000 workers and slash the labour code. Both revolutionaries would have difficulty enacting their agendas. Even if she were to prevail, Ms Le Pen's party would not win a majority in the national assembly. Mr Macron barely has a party.

La France ouverte ou la France forteresse?

Nonetheless, they represent a repudiation of the status quo. A victory for Mr Macron would be evidence that liberalism still appeals to Europeans. A victory for Ms Le Pen would make France poorer, more insular and nastier. If she pulls France out of the euro, it would trigger a financial crisis and doom a union that, for all its flaws, has promoted peace and prosperity in Europe for six decades. Vladimir Putin would love that. It is perhaps no coincidence that Ms Le Pen's party has received a hefty loan from a Russian bank and Mr Macron's organisation has suffered more than 4,000 hacking attacks.

With just over two months to go, it seems Ms Le Pen is unlikely to clinch the presidency. Polls show her winning the first round but losing the run-off. But in this extraordinary election, anything could happen. France has shaken the world before. It could do so again. ■

Nigeria's sick president

Get well soon, Mr Buhari

But have you noticed that the economy improved while you were away?



EVER since word trickled out that Muhammadu Buhari, Nigeria's 74-year-old president, was not just taking a holiday in Britain but seeking medical care, his country has been on edge. Nigerians have bad memories of this sort of thing. Mr Buhari's predecessor bar one, Umaru Yar'Adua, died after a long illness in 2010, halfway through his first term. During much of his presidency he was too ill to govern effectively, despite the insistence of his aides that he was fine. In his final months he was barely conscious and never seen in public—yet supposedly in charge. Since he had not formally handed over power to his deputy, Goodluck Jonathan, his incapacity provoked a constitutional crisis and left the country paralysed.

There is nothing to suggest that Mr Buhari is as ill as Yar'Adua was. But that is because there is little information of any kind. His vice-president, Yemi Osinbajo, insists that his boss is " hale and hearty". Mr Buhari's spokesman says his doctors have recommended a good rest. Yet even members of Mr Buhari's cabinet have not heard from him for weeks, and say that they do not know what ails him or when he will return.

Such disclosure would be expected in any democracy. In Nigeria the need is even more pressing. Uncertainty is unsettling the fractious coalition of northern and southern politicians that put Mr Buhari into power. Nigeria is fragile: the split between northern Muslims and southern Christians is one of many that sometimes lead to violence. The country also faces a smouldering insurrection in the oil-rich Delta and an insurgency in the north-east by jihadists under the banner of Boko Haram ("Western education is sinful").

Mr Buhari, an austere former general, won an election two years ago largely because he promised to restore security and

fight corruption. Although his government moves at a glacial pace, earning him the nickname "Baba Go Slow", he has wrested back control of the main towns in three states overrun by Boko Haram. Yet the jihadists still control much of the countryside, and the government has been slow to react to a looming famine that has left millions hungry.

On corruption, Mr Buhari has made some progress. A former national security adviser is on trial in Nigeria for graft, and a former oil minister was arrested in Britain for money laundering. So far, however, there have been no big convictions.

Mr Buhari's main failures have been economic (see page 35). The damage caused by a fall in the price of oil, Nigeria's main export, has been aggravated by mismanagement. For months Mr Buhari tried to maintain a peg to the dollar by banning whole categories of imports, from soap to cement, prompting the first full-year contraction of output in 25 years.

First, do no harm

With Mr Buhari in London, the country's economic stewardship has, whisper it, improved a bit. Mr Osinbajo has allowed a modest devaluation and started on reforms aimed at boosting growth. This is already paying off. In February the government sold \$1bn-worth of dollar-denominated bonds, its first foreign issue in four years. Demand was so great that investors bid for almost \$8bn-worth of the notes, raising hopes of a second bond sale later this month.

If his health recovers, Mr Buhari still has two years left in office. He should focus on doing what he does best: providing the leadership his troops need to defeat Boko Haram and the moral authority to clamp down on corruption. And, noting how much better the economy is doing without him trying to command it like a squad of soldiers, he should make good on a long-forgotten electoral pledge to leave economic policy to the market-friendly Mr Osinbajo. ■

Red tape in America

Doing deregulation right

America needs regulatory reform, not a crude cull of environmental rules



WHAT does the Republican Party, led by Donald Trump, agree on? In addition to an enthusiasm for power, two things unite the conservatism of Stephen Bannon, the president's consigliere, with the conservatism of Mitch McConnell and Paul Ryan, the Republican leaders in Congress. One is tax cuts, on which he has thus far been vague. The other is deregulation, which matters more to Republicans now than debt or deficits.

The president promised "a historic effort to massively reduce job-crushing regulations" when he spoke to a joint ses-

sion of Congress on February 28th. Mr Bannon has announced nothing less than "the deconstruction of the administrative state". That project began with an executive order requiring federal agencies to get rid of two regulations for every new one they issue. It continued this week when the White House proposed slashing the budgets of many federal agencies. Under Barack Obama, CEOs grumbled constantly about burdensome new regulation and more zealous enforcement of existing rules. Stockmarkets have soared, possibly on a belief that undoing all this will bring much faster growth.

Something has indeed dampened America's economic dynamism. Startups are rarer, labour is less mobile and fewer people switch jobs than they did three decades ago. Regula- ►►

tion has shot up the list of small firms' concerns since 2008. Yet there is a right way and a wrong way to deregulate. Markets need clear rules, enforced predictably. Less regulation is not always better: the freedom to dump toxic sludge into rivers will not improve Americans' living standards. Republicans must ensure that they do the right sort of deregulation (see page 26). There is little to be gained from crudely hacking at Mr Obama's handiwork, while ignoring systemic problems that have led to a proliferation of rules, whoever is in charge.

Don't just blame the bureaucrats

By one estimate, the number of federal edicts has risen steadily for almost four decades, from about 400,000 in 1970 to 1.1m. One reason for this proliferation is that bureaucrats much prefer writing new rules to rubbing out old ones. They scrutinise policy rigorously, but usually only in advance, when little is known about its impact. Little effort is made to analyse whether a rule's benefits still justify its costs once implemented. Instead, politicians rely on gut instinct to tell them whether firms' complaints about over-regulation are reasonable.

Political gridlock is another reason for regulatory sprawl. When a president is blocked by a hostile Congress, as Mr Obama was for most of his time in office, the temptation is to exercise power by issuing rules through the federal bureaucracy. But even when Washington is unified, as it is now, Congress and the executive branch find it much easier to issue new edicts than to undo old ones. The same is true at the state level.

The result is a proliferation of rules at all levels of government—rules that can slow innovation, but which also impede straightforward tasks, such as fixing bridges. When Mr Obama

tried to finance “shovel-ready” infrastructure projects after the recession, he found that many lacked the long list of permits and approvals necessary to start building. Any infrastructure push by Mr Trump will run up against the same roadblocks.

Fixing this requires substantial change. Mr Obama made a modest start by directing agencies to evaluate old regulations. Mr Trump's demand that agencies must abolish old rules before writing new ones sounds crude, but provides a welcome incentive for bureaucrats to look again at old rulings. The strategy has had some success in Britain and Canada.

The White House should bolster the office that scrutinises proposed rules. It has seen its staff fall by half over three decades, while regulations have proliferated. Congress should appoint experts to scrutinise regulation on its behalf, as it has done for budgetary matters. This new body could review old rules as a matter of course. If these edicts do not pass a cost-benefit analysis, they should expire automatically.

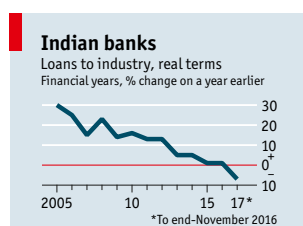
Unfortunately, the approach many Republicans favour is to make it harder for the executive branch to do anything at all. Some want to subject every new rule to a congressional vote. Yet few politicians are equipped to scrutinise, say, arcane financial rules. Such votes are more likely to create feeding opportunities for lobbyists—and, in turn, more of the exemptions that increase regulatory complexity and harm competition.

The Republicans are right that America's regulatory sprawl needs tackling. A well-executed drive to cut red tape will doubtless bring economic gains. But it will be painstaking work, a far cry from the slash-and-burn approach the Trump team has in mind. Crude rule-cutting and budget-slashing will simply leave America dirtier and less safe. ■

Indian banks

From worse to bad

A bad bank would be a start—but only that—towards cleaning up India's ailing financial system



IF YOU owe a bank a hundred dollars, it is your problem. If you owe a hundred million, it is the bank's problem. If you are one of many tycoons borrowing billions to finance dud firms, it is the government's problem.

That is roughly the situation

India finds itself in today. Its state-owned banks extended credit to companies that are now unable to repay. Like the firms they have injudiciously lent to, many banks are barely solvent. Almost 17% of all loans are estimated to be non-performing; state-controlled banks are trading at a steep discount to book value. After years of denial, India's government seems belatedly to have grasped the threat to the wider economy. Plans are being floated to create a “bad bank” that would house banks' dud loans, leaving the original lenders in better shape. The idea is a good one, but it must be properly implemented and is only the starting-point for broader reforms.

The bad-loan mess has been years in the making. India skirted the financial bust of 2007-08, but then complacency ensued. Banks went on to finance large-scale projects—anything from mines and roads to power plants and steel mills—which often ended in disappointment. Over 40% of loans

made to corporate India are stuck in firms unable to repay even the interest on them, according to Credit Suisse, a bank. The result is a “twin balance-sheet problem”, whereby both banks and firms are financially overstretched. Corporate credit is shrinking for the first time in two decades (see page 57).

In an ideal world, the banks would write down the value of the loans. The resulting losses would require fresh funds from shareholders. India is far from that ideal. It takes over four years to foreclose on a loan (a newish bankruptcy law should help). The government is the main shareholder of the worst affected banks, and has been reluctant to inject more cash. Bankers themselves are afraid to deal with loans pragmatically, because that often gets mistaken for cronyism.

Clean energy needed

The solution so far has been to pretend nothing much is wrong. The banks have rolled bad loans over, hoping that growth would eventually make things right. This is a poor strategy, as anyone who followed Japan in the 1990s and Italy since the financial crisis well knows. It is only a matter of time before the banks' difficulties derail India's economic prospects. Hence talk of setting up a bad bank to sort out the mess.

Bad banks have been used with success in the past—in Sweden in the 1990s, for example, and in Spain in recent years. But ►

▶ if they are to work, candour and cash are both needed. The candour is required to assign a realistic value to banks' soured loans. Indian lenders must be compelled, and quickly, to sell loans to the bad bank even at a hefty discount to face value, no matter how much it may wound their pride or dent their profits. That is where the cash comes in. When those write-downs eat up capital, the state must be ready to make up the shortfall even if it means borrowing more to do so.

That is only a start, however. A bad bank could resolve this crisis. But to make future ones less likely, broader reforms are needed. Some are under way. Political interference (loans to a minister's buddy, say) and dysfunctional governance (many bank bosses get only one-year stints at the helm, for example) are less of a problem than they once were. But lenders should

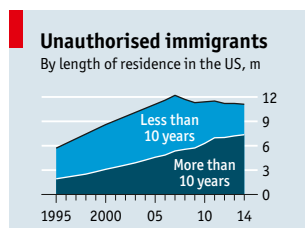
not be instruments of the state. Private investors should be allowed to play a bigger role in cleaned-up banks, even if that means the government has to give up majority control.

India's "promoters", as the founders and owners of big businesses are known, also need to be reined in further. Tycoons have the upper hand in negotiations with their lenders because they know that red tape, patronage and antiquated legal systems make it all but impossible to seize the assets of defaulting firms. In effect, they cannot be replaced at the helm. Resolving this imbalance would make it more likely that dud loans are a headache for banks and borrowers, not for the finance minister. It is good that policymakers appear to be waking up to the magnitude of India's banking problem. Whether they appreciate the scale of the solution is less clear. ■

Deportation

Oiling the machine

Germany's efforts to deport more unauthorised immigrants are sensible. Not so America's



TO IMMIGRANTS who live in the shadows, or in the interminable half-light of the asylum system, the signals in two large countries are ominous. Germany's government is seeking to make it easier and quicker to deport failed asylum-seekers.

America promises to "take the shackles off" its immigration officers and boost their numbers. In a speech to Congress on February 28th, Donald Trump mentioned two illegal immigrants—both of them murderers.

In both countries, politics is lubricating the deportation machine. Mr Trump is delivering the crackdown he promised on the campaign trail; Germany is gearing up for elections in September, in which the anti-immigration Alternative for Germany party threatens to do well. In both countries, civil-rights groups call deportation brutal and unfair. In both, the federal government has clashed with local officials. But the differences are instructive, too. Germany's actions are proportionate and sensible. America's are not.

Pick your targets carefully

In principle, deporting people who fall foul of immigration rules is wise, even liberal. It is the corollary of a generous immigration system—proof that rules can be upheld and that a country can open its doors without losing control. In practice, deportation is tricky and choices must be made. It can be done humanely and efficiently. Or it can be callous and sloppy, so that it tears social bonds and makes a country less safe.

Since January 2015 almost 1.2m people have sought asylum in Germany—more than in any other European country. Of the cases it has heard, Germany has accepted 39% as refugees and offered protection to others. That still leaves a lot of rejects, many of whom are clinging on. Soon there could be half a million foreigners in Germany who have been told to leave.

Although deporting them all would be impossible—many are not acknowledged by the countries they fled—Germany wants to push more out of the door. So it plans to ban failed asylum-seekers from moving around the country and to offer

money to hopeless cases if they depart of their own accord (see page 46). It will crack down on serious criminals. The federal government is also prodding states to be more vigorous. They are in charge of deportations, and at the moment they do not all agree that it is safe to return people to Afghanistan.

As Germany tries to deter recent arrivals from digging in, and focuses on the worst offenders, America is doing more or less the opposite. It has about 10m illegal immigrants, according to the Pew Research Centre. Two-thirds of the adults have been in the country for at least ten years and two-fifths have children, many of whom are citizens. Although almost all illegal immigrants could in theory be deported, in recent years most effort has gone on removing recent arrivals and those who have committed serious crimes.

Not any more. America's Department of Homeland Security proposes to target all illicit immigrants who have "committed an act for which they could face charges". Since Congress has criminalised many things that such people do (eg, using false Social Security numbers) that means open season on almost everyone. More children will be deported; parents who pay smugglers to bring their offspring to America will be prosecuted. Local police will be used as "force multipliers".

By widening the net to catch longer-established immigrants, who tend to have children and better jobs, Mr Trump's government will cause immense harm to families and to the country. Already-long queues at the immigration courts will lengthen. Federal officers will be pitted against local ones. Police in many cities refuse to act as proxy immigration officers, on the sensible ground that illegal immigrants should not be afraid of talking to them. Pushing them to co-operate with gung-ho federal officers invites a clash. Last week the mayor of Los Angeles told immigration officers to stop referring to themselves as police.

In America, many illegal immigrants have been around for decades and become part of society. Confusingly, when Mr Trump is not tarring unauthorised migrants as murderers, he says he is open to talking to Democrats about a comprehensive reform that would allow some of them to become legal (though not to earn full citizenship). That would be an excellent idea; but so far his actions speak louder than his words. ■

A firm's long-term interests

Schumpeter's recent column on corporate short-termism suggests that "the solution is to prod incumbent firms to invest vast amounts and insulate their managers from investors" (February 18th). On the contrary, the solutions should be much more targeted to how capital markets really work.

We are exploring two such solutions. One is rethinking the quarterly guidance process to engage managers with, rather than insulate them from, investors in their long-term strategic thinking. The second solution is to change the relationships and incentives between asset owners and fund managers to ensure that the long-term needs of savers and beneficiaries are best served in the investment process.

Short-termism is a real issue that limits investments in human, intellectual and physical capital. Rebalancing the focus away from short-termism towards long-term goals isn't easy, but making investments that drive innovation, job creation and savings certainly is not, as Schumpeter believes, "a distraction".

SARAH KEOHANE WILLIAMSON
Chief executive officer
FCLT Global
Boston

Floating bubbles

Buttonwood confounds two questions that need to be asked separately: whether it is possible to recognise a bubble in real time and whether one can avoid the big losses typically associated with a crash (February 11th)? Presumably, recognising the bubble would help investors predict and thereby avoid a crash. But not every bubble needs to end in a crash, just as not every price collapse needs to be preceded by a bubble.

The column also illustrates the importance of defining a bubble. If you define a bubble, as William Goetzmann does, partly by its demise, then it becomes logically impossible to use it as a warning signal. The bubble can, by this defini-

tion, only be recognised after the event. And if one were to allow the possibility that bubbles can be negative too, the rise "by more than two standard deviations" used by GMO, a fund-management group, could reflect the re-adjustment of the price to fundamentals rather than portend a crash. Much hinges on the precise meaning of the term. Alas, how to define a bubble has proved so vexing to the profession that Eugene Fama of the University of Chicago unsubscribed from your newspaper in exasperation because of the vague use of the term.

Answering the questions Buttonwood asks is not possible before we become more clear about what exactly constitutes a market bubble.

HYUN-U SOHN
DIDIER SORNETTE
Chair of entrepreneurial risks
ETH Zurich

Leaving has wide support

It is misleading to say that Scots are being dragged out of the European Union "by the English" ("Sliding towards Scoxit", February 18th). The referendum was held across the United Kingdom. We may be dragged out of the EU by the Leave votes of other individuals across the UK, but that includes the more than 1m people in Scotland who voted to Leave. Many of us who voted Remain in Scotland still support Scotland's place in Britain, and we do not want another divisive independence referendum. More nationalism is not the answer.

MARTIN REDFERN

Edinburgh

Banking and the elderly

As a 69-year-old with the temerity to think she still has all her marbles, I fear becoming the victim of financial "mass-marketing scams" far less than I fear becoming the victim of paternalistic bank staff who have received training "in how to spot dementia and signs of financial abuse" ("Not losing it", February 11th). This is especially the case if

"changes in spending patterns" are seen as warning signals of cognitive decline in the elderly. The "expert on Alzheimer's" who thinks old people would like to have banks "identify older people who are at risk and refer them to doctors or social workers" should know that not all old people are alike. Why not let each old person indicate in advance whether he wants his bank to perform this function? I bet I'm hardly the only one who will say no.

FELICIA NIMUE ACKERMAN
Professor of philosophy
Brown University
Providence, Rhode Island

The people left behind

I read your piece on the complex political and social past of northern Alabama's yeoman farmers ("The little man's big friends", February 11th). I would add that the same peoples who settled in the pine woods of Alabama's mountains, also settled in similar areas of Mississippi. In her book "The Free State of Jones", Victoria Bynum outlined the history of the Scottish immigrants who settled the mountains of North Carolina, participated in the pre-revolutionary Regulator Movement and later migrated to Georgia and then to Alabama and Mississippi.

Like Winston County in Alabama, Jones County in Mississippi also "seceded" from the Confederacy. Unfortunately, these yeoman farmers and their descendants have been ignored and even despised by politicians, liberal and conservative. American culture has characterised them as hopelessly ignorant and backward. As Ms Bynum says, "Northerners' indifference and

sometimes outright contempt ultimately encouraged white Unionists to move closer to the southern conservative coalition, which actively courted them with racist appeals to manly honour." Not much has changed since then.

DAVID PERASSO
Seattle

Save the green belt

Bagehot put the entire blame for Britain's housing crisis on the "insensitive" green belt (February 11th). This presupposes the problem is caused by a lack of new build housing supply. Yet in 2011 there were 1.1m vacant homes in Britain. Empty Homes, a charity, estimates that more than 200,000 were empty over the long-term, most of them because their owners could not raise sufficient capital to refurbish their property. This is not surprising given that government policy favours the building of new houses over the more logical option of refurbishing existing houses (tax is charged on the latter).

Add to this the latent housing stock that could be regenerated from unused commercial space within our cities, and the potential supply of new homes already built is enormous. That would spare us building on the green belt, which is an important bulwark against urban sprawl.

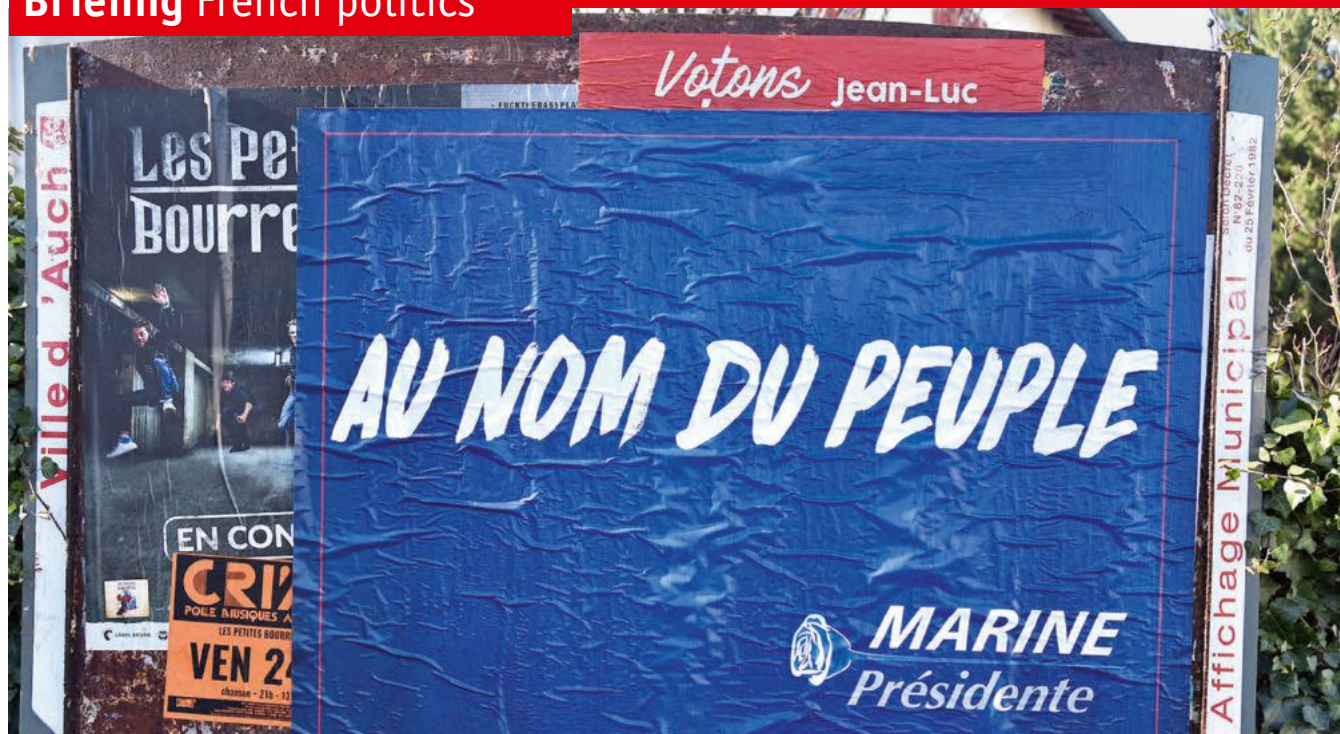
RICHARD WALKER
Chester

Going down the pan

Your review of "Why Time Flies" by Alan Burdick pointed out that humans are "poor judges of the duration of time" ("Clock-watching", February 11th). As someone once said: life is like a roll of toilet paper; the closer you get to the end of the roll, the faster it goes.

W. TATE IV
Ewing, New Jersey ■

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Fractured

COGOLIN AND PARIS

Resurgent French populism reflects a new social faultline

WITH its shuttered façades, narrow streets and shaded main square, this small southern town has a certain Provençal charm. It boasts a twice-weekly market, two well-equipped sports halls, a public library and a narrow strip of beach. Yet an intangible air of disappointment hangs over Cogolin. Its poverty rate is well above the national average. Unemployment, at 18%, is nearly twice that of France as a whole. Many of those with jobs belong to the army of workers who repaint, clean, mow and cook at the villas and yachts of nearby Saint-Tropez. In 2014 the town elected a mayor from the xenophobic National Front (FN) with 53% of the vote.

Nearly three years into his term, Marc Etienne Lansade embodies the new-look FN. There are no shaven heads to be found at the town hall. With his monogrammed shirts and leather loafers, this former property developer from a chic suburb of Paris talks at length of his plans to develop Cogolin's marina. He has taken on debt, partly to pay for extra local policemen. He is unapologetic about favouring expressions of Roman Catholic identity, such as a Christmas nativity scene in the town hall, dismissing critics of such gestures as "leftist Islamophiles". He may come across as a hard-right deal-maker, but not as a thug.

Local opponents accuse him of financ-

ing his development plans in "opaque" ways and an "ideological" hostility to cultural diversity, such as North African songs or dances in schools. The voters, though, seem undeterred. The year after they elected Mr Lansade, 54% of voters in Cogolin backed the FN candidate, Marion Maréchal-Le Pen, niece of Marine Le Pen, the FN's leader, at regional elections. And a great many will vote for Ms Le Pen herself in the first round of the forthcoming presidential election on April 23rd.

No precedents for the president

At a Cogolin bakery where Algerian pastries are nestled next to the baguettes, a middle-aged woman, asked about her country's politicians, says she has "a real desire to kick them all up the backside". Over the past few months almost all the most prominent of them, save Ms Le Pen, have thus been kicked. In the centre-right primary, held in November, voters rejected an ex-president, Nicolas Sarkozy, and an ex-prime minister, Alain Juppé. In January's Socialist primary they turfed out another ex-prime minister, Manuel Valls. They would have rejected François Hollande, too, had he not already bowed out of the race—an unprecedented move for a sitting French president.

This bonfire of the elites has left France

with a slate of candidates all but one of whom were not considered serious contenders for any party's nomination six months ago. One of them, Emmanuel Macron, a former Socialist economy minister, is a candidate without the backing of an established party but with a real chance of victory, another unprecedented development. Benoît Hamon, the Socialist Party's candidate, is a former backbench rebel against his own party. The centre-right nominee, François Fillon, will be put under formal investigation on March 15th accused of abusing his office to pay unearned salaries to his family; nevertheless, he says he will fight on.

And then there is Ms Le Pen. The populist leader, who has run the FN since 2011, leads *The Economist's* poll of polls (see chart 1 on next page). There is a good chance that she will come top in the first round of the election—again, something for which there is no precedent. (When her father, Jean-Marie Le Pen, the FN's founder and former leader, got into the second round in 2002 it was as the first-round runner-up, with just 17% of the vote). For the other candidates the election has become a race to stand against her in the second round on May 7th, and the campaign a test of the ability of mainstream politicians to shape a response to renaissance nationalism.

Ms Le Pen will find it difficult to win in the second round; as yet, no poll has shown her doing so. One recently found her losing to Mr Macron by 42% to 58%; against Mr Fillon she does a bit better. But the margins leave little room for complacency. She is a strong campaigner, with a well organised party. Mr Macron, for all that he is fighting an insurgent campaign, ►

▶ can be painted as a very establishment character—of the sort who came off much worse in the votes for Brexit and Donald Trump than elite opinion expected. Many voters remain undecided, and more may still be biddable. Over two-fifths of those who have made a choice admit that they may yet change it.

Nicolas Baverez, a lawyer and commentator, compares France's mood to that of 1930, when fascism was on the rise, or even 1789, the eve of the French revolution. In the parquet-floored salons of Paris, conversation readily turns to such sombre parts of history. "The historian in me is very pessimistic," says Dominique Moïsi, of the Institut Montaigne, a think-tank, "because I know that these things can happen."

The election of Ms Le Pen would not only bring to power a leader who has compared Muslims praying in the street to the Nazi occupation of France. It would prompt a crisis of government: the FN is highly unlikely to win a majority in June's legislative elections, even if she is president. And it would threaten the future of Europe. Ms Le Pen has promised to abandon the euro in favour of a new franc and to hold a referendum on leaving the EU within her first six months (though she would need parliamentary approval to do so). The EU can survive the loss of Britain; the loss of France would bring the project that has underpinned the European order for the past 60 years to a close.

The new geography puts all in doubt

In some ways, the emergence of Ms Le Pen matches a pattern of insurgent populism across Western liberal democracies. A fear of job losses due to automation and deindustrialisation; a backlash against immigration; a distrust of self-serving political elites; the echo-chamber effect of information spread on social media: common factors helping populist political movements elsewhere have touched France, too.

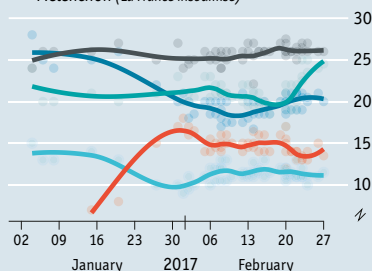
Ms Le Pen's support, like support for Mr Trump and Brexit, is well correlated with education. Only 8% of French citizens with a degree voted FN in 2014; 41% of those without a high-school diploma did. As with Mr Trump, men are better disposed to the FN than women. Ms Le Pen, like Mr Trump, is particularly popular in old industrial towns from which jobs and confidence have drained away, taking with them faith in parties of the left (see chart 2).

Perhaps the most distinctive aspect of the FN vote, though, is the faultline it reveals between the country's cosmopolitan cities, at ease with globalisation, and those in-between places where farmland gives way to retail sprawl and a sense of neglect. Between 2006 and 2011, the number of jobs in 13 big French cities—Lyon, Marseille, Toulouse, Lille, Bordeaux, Nantes, Nice, Strasbourg, Rennes, Grenoble, Rouen, Montpellier and Toulon—increased on av-

The one to beat

France, presidential election polling, first round

Selected candidates, %



Sources: National polls; The Economist

erage by 5%. In France as a whole, jobs were lost. These dynamic cities, with their elegant pedestrian centres, tech hubs and gourmet food, vote for the left (Lyon, Nantes, Rennes), the greens (Grenoble) or the centre-right (Bordeaux). They are not immune to France's feeling of being fed up; in April and May, many of them may opt for Mr Macron. But none registers a strong vote for the FN.

Around them, though, is what Christophe Guilluy, a geographer, calls "peripheral France". This is the world of lost employers like the Lejaby lingerie factory in Bellegarde-sur-Valserine, in the foothills of the Alps, or the Moulinex factory in Alençon, in southern Normandy. It is a world where Uber, bike-share schemes and co-working spaces are nowhere to be found, and where people sense that globalisation has passed them by. It is a world where the FN is on the rise.

The FN's first base was in the south, where Mr Le Pen built support among French settlers returning from independent Algeria in the 1970s. Its second was the rust-belt of the north and east, where it scooped up the disappointed vote that once went to socialists or communists. Maps by Hervé Le Bras, a demographer,

show that the FN now has a third home in Mr Guilluy's peripheral areas—beyond the outskirts of the cities, but not deeply rural. In a ring of communes between 40km and 50km from the centre of Paris, for example, the FN's candidate in the 2015 regional elections, Wallerand de Saint-Just, won 32% of the vote. In places 80km out or more, he scored fully 41% (see chart 3 on next page).

Isolation boosts FN support. "The farther you live from a railway station", says Mr Le Bras, "the more you are likely to vote FN." France has high-quality public services, and its citizens have matching expectations for the fabric of their lives. When that fabric thins—when a local butcher closes, or a doctor leaves town—they feel neglect. A common factor behind the FN vote in such places, says Jérôme Fourquet, director of Ifop, is "a sense of abandonment, of being left behind by an elite that doesn't care."

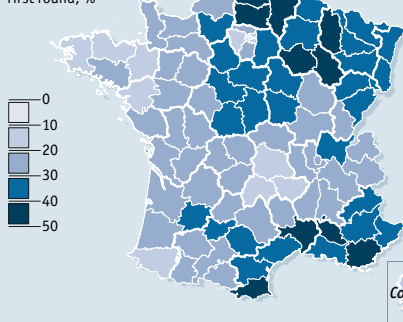
Ms Le Pen exploits this sentiment with uncanny skill. Born into politics and raised in a mansion in a swish Parisian suburb, she somehow manages to speak for those she calls the country's "forgotten" in a way they find credible. The reason this works is partly Ms Le Pen's shrewd feel for simple language and anti-elite slogans. But it is also because France has been going through an unusually unsettled time that has left people looking beyond the established parties and given French populism distinctive features.

One is a sense that a great country, the cradle of human rights and the Enlightenment, has somehow lost its way. This is particularly obvious in economic terms. Since the end of the *trente glorieuses*, the three decades of strong growth that followed the second world war, it has been debt, rather than growth, that has financed the high-speed trains, the blooming municipal flower beds and the generous provisions for child care, ill health, job loss and old age that are the hallmark of France's splendid public sector. French public spending now accounts for a greater ▶▶

Where the jobs aren't

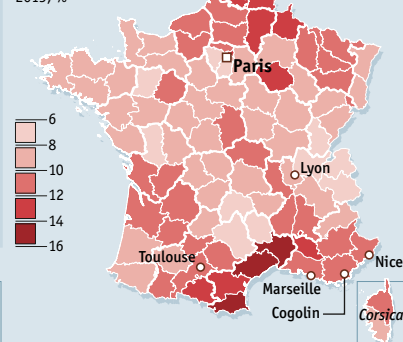
France, by department

National Front vote share
2015 regional elections,
first round, %



Sources: French Ministry of the Interior; INSEE

Unemployment rate
2015, %



share of GDP than it does in Sweden. But no French government has balanced its budget since 1974.

Over the past 15 years, there has been a particular *décrochage*, or decoupling, between the French economy and that of Germany, its closest ally. In 2002 the two countries enjoyed comparable GDP per head. Germany, under Gerhard Schröder, began to reform itself. France, under Jacques Chirac, didn't. Today, Germans have 17% more purchasing power per person. Labour costs in France have risen faster than in Germany, deterring the creation of permanent jobs and undermining competitiveness. The country's share of all goods exports between EU countries has dropped from 13.4% to 10.5%.

Most devastating is unemployment. In 2002, it was a tad higher in Germany. Today it has dropped to 4% on that side of the Rhine, but in France it remains stuck at 10%, and at 25% for the under-25s. Over 80% of new jobs are on short-term contracts, with "short-term" often meaning just a month. A generation of young French people has grown up outside the country's famously protected job market. The votes for Mr Trump or Brexit were weakest among the under 25s; but the young French support the FN more than any other party. (Conversely, older voters have much less truck with Ms Le Pen than their Anglophone peers did with Brexit and Mr Trump; polls say they fear for their savings and pensions if France leaves the euro.)

Shame isn't a strong enough emotion

Economic self-doubt has been compounded by a sense of what Laurent Bouvet, a political scientist, calls "cultural insecurity". Three big terrorist attacks within the space of 18 months, in 2015 and 2016, battered France's confidence. The coming presidential election will be conducted under a state of emergency which has been renewed four times since November 2015. The French have had to learn to live with soldiers patrolling the streets and railway stations, a daily visual reminder of their vulnerability.

Legitimate worries about terrorism have supplied fertile ground for insidious identity politics. As the home to one of Europe's biggest Muslim minorities, France is more alert than, say, Italy or Spain to hints of religious extremism. Moreover, the country has a pre-existing and unforgiving framework for managing religious expression—known as *laïcité*—which recent governments, fearing a threat to secularism, have tightened up. When this provokes a row—over Muslim head-coverings, say—it plays straight into Ms Le Pen's hands; she has little trouble persuading voters that their values are under threat. France, she tells her flag-waving rallies, faces nothing less than "submersion".

Ms Le Pen succeeds not because of the

way her policies, which include a lower retirement age, more taxes on foreign workers and massive increases in spending on the armed forces, would tackle economic insecurity or the threat of terror (they wouldn't). It is because of her talent for blending two strands of populism: anti-migrant talk about values and churches, strong in the south, and anti-market discourse about jobs and the system, favoured in the north. On both counts, she can tap into French history.

Ms Le Pen may have purged the FN of the overt anti-Semitism and neo-Nazi imagery of her father's era. Yet her party remains originally rooted in a nostalgia for colonial Algeria and supporters of Marshal Pétain, who collaborated with the Nazis. Churches, flags and the homeland remain potent symbols in this world. Campaigning in Provence Ms Maréchal-Le Pen frequently recalls the country's roots in Christendom. At her aunt's political rallies, supporters can be heard chanting: "On est chez nous" (This is our home).

At the same time, anti-establishment politics fits her compatriots' self-image as a nation of revolutionaries, pitchforks in hand. When Mr Le Pen was first elected to the National Assembly, in 1956, it was on a list led by Pierre Poujade, who evoked this tradition when he spoke up for "the little people": "The downtrodden, the trashed, the ripped off, the humiliated." It is no coincidence that Ms Le Pen's campaign slogan is "In the name of the people".

A final ingredient gives French populism a further twist: Euroscepticism. Invaded three times by Germany since 1870, and on its fifth republic, France has a long disrupted history, insecure even in peace. After the second world war it dealt with this by building Europe—a project by which it sought to bind in Germany and to amplify its own power. The French regarded the ceding of sovereignty as a means of reinforcing, not undermining, their nation state.

Europe remains an important part of French identity. But somewhere along the line the passion it once evoked cooled down, and the consensus supporting it fal-



Mastering the common touch

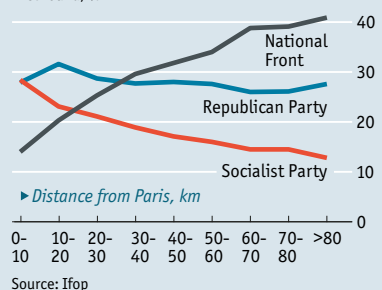
tered. Second thoughts spread long before the recent currency and refugee crises. In 1992, the French approved the launch of the union's single currency by the slimmest of margins. In 2005 they rejected the draft EU constitution. The share of French people who see Europe favourably dropped from 69% in 2004 to 38% in 2016, according to Pew, a polling group; that makes the EU less popular in France than in Britain. This has given the FN a fresh electoral cause. Ms Le Pen speaks of Brexit as a model of emancipation from the shackles of what she calls the "European Soviet Union".

The feeling that France has lost its sense of purpose goes well beyond those tempted to vote for the FN. So does exasperation with the failures of both the left and the right to put the national interest first, and fix the country. At every national election for the past ten years, at all levels of government, the French have voted against the party in overall power; fully 89% of the French told a recent poll they thought the country was heading in the wrong direction. It is this that has opened the way for a party refusenik such as Mr Macron—who, should he win, will have to get the people to break their unerring habit of resisting the change they have just voted for, a habit that accounts for much of their frustration.

In "Le Mal Français", a book published in 1976, Alain Peyrefitte, a minister under Charles de Gaulle, lamented the fact that such a talented country had produced such a blocked system. Every now and then, it seems, France needs to go through convulsions of abrupt change in order to free itself from *l'immobilisme* (paralysis). History shows that such moments of upheaval can produce startling and creative forces for renewal. But they can also pre-empt a slide into darkness. In Mr Macron's cities, and Ms Le Pen's peripheries, France is poised to go either way. The choice it makes could scarcely matter more. ■

Ring around the roses

France, 2015 regional election results
Paris region, vote share by distance from capital
First round, %





Also in this section

- 20 North Korea uses VX for murder
- 20 Donald Trump and Afghanistan
- 21 The politics of language in Sri Lanka
- 22 Militarist toddlers in Japan

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Philippine politics

Death and taxes

MANILA

Rodrigo Duterte's bloody war on drugs is impeding the sensible bits of his agenda

POLITICAL norms may be crumbling all around the world, but citing Adolf Hitler as an inspiration remains a no-no almost everywhere. That did not stop Rodrigo Duterte, the outspoken president of the Philippines, who declared in September that he wanted to do to Filipino drug addicts what Hitler had done to Jews.

So far, Mr Duterte's drug war has seen more than 7,000 drug suspects killed by police, vigilantes and rivals (the three categories overlap). Most Filipinos are enthusiastic, albeit nervous for their safety; many foreigners are appalled. Love it or hate it, the campaign has totally overshadowed Mr Duterte's eight months in office. Yet Filipinos elected Mr Duterte not just for his "Duterte Harry" approach to crime, but because of a much broader pledge to upend the status quo by elbowing aside entrenched elites, reducing yawning inequality and repairing crumbling infrastructure. In addition to its terrible cost in lives, Mr Duterte's anti-drugs crusade risks becoming a distraction from the many more constructive items on his agenda.

The most important measure Mr Duterte's administration has so far presented to Congress, where his supporters hold a hefty majority, is the first of five ambitious tax-reform bills. It would lower the top personal income-tax rate from 32% (relatively high for the region) to 25%, and would raise the threshold at which tax becomes payable. To offset those losses, the bill would

increase taxes on fuel and vehicles. The second bill, which the government plans to introduce later this year, would reduce the corporate income-tax rate from 30% (also high for the region) to 25%, while trimming tax breaks. Later measures would lower inheritance taxes, make more goods and services subject to value-added tax (VAT) and raise taxes on alcohol, cigarettes and, perhaps, sugary drinks.

Carlos Dominguez, the finance minister, says these changes should raise revenue, despite lowering headline rates. The lower personal rate will, he hopes, deter tax evasion by reducing the incentive to cheat. The lower corporate rate is intended to attract more foreign investment.

Tax and spend

Increased revenues are essential to Mr Duterte's ambitious infrastructure plans. For years the country has underinvested in infrastructure—in the World Economic Forum's most recent Global Competitiveness Index, the Philippines ranked 95th in the sector, well below its South-East Asian peers. Mr Duterte's administration wants to spend 5-7% of GDP on infrastructure, roughly what his predecessor, Benigno Aquino, managed in his last year, and well above the average rate between 1980 and 2009 of around 2%. Manila has some of the world's worst traffic—two-hour commutes in each direction are not unusual. As a candidate, Mr Duterte promised to do some-

thing about it, which helped win him support from Manila's middle class.

Priorities, according to Mr Dominguez, include better airports and railway lines around the country, notably in Mr Duterte's underdeveloped home island of Mindanao, and between Manila, Subic Bay and Clark—raising the possibility of a new international airport at Clark to relieve congestion at the abysmal one that serves Manila. Numerous projects approved by the previous administration are scheduled for completion during this one, giving Mr Duterte plenty of opportunities to grin, cut ribbons and claim credit.

Other items on the "ten-point socioeconomic agenda" he released shortly before taking office include relaxing restrictions on foreign ownership of companies, overhauling land-tenure laws, improving the country's health and education systems, promoting rural development and broadening access to contraception.

Mr Duterte is also well positioned to put an end to two of his country's longest insurgencies. Mr Aquino presented Congress with a bill granting autonomy to Muslims in Mindanao; Mr Duterte, who got on well with Muslims as mayor of the island's biggest city, says he supports it. In February he cancelled peace talks with the communist New People's Army, but he has close ties (too close, whisper some) with leftists, and the two sides may soon find their way back to the negotiating table.

Making good on any of these initiatives requires attention and discipline from the top, however, and Mr Duterte remains almost wholly focused on drugs. Many hoped that would change: in late January Mr Duterte suspended his drug war after rogue police officers killed a South Korean businessman. But this week the national police chief said that drugs are creeping back onto the streets, and the president ►►

North Korean assassination

VX marks the spot

SEOUL

The venomous ways of a monstrous regime

THE murder of Kim Jong Nam, half-brother of Kim Jong Un, the North Korean dictator, had already seemed outlandish enough. According to the Malaysian authorities, two women in their 20s had stolen up behind him at Kuala Lumpur International Airport on February 13th, smeared some kind of poison on his face and then slipped away into the throng of travellers. Within 20 minutes Mr Kim was dead.

The results of an autopsy, announced ten days later, were more extraordinary still: they showed the poison to be vx, the deadliest nerve agent ever synthesised. That firmly pointed the finger at North Korea's repressive regime, which is thought to have a vast stockpile of chemical weapons, vx among them. The nerve agent is classified as a weapon of mass destruction and banned under the Chemical Weapons Convention—which North Korea, along with only three other countries, has not signed. Just one litre of the stuff could kill 1m people, such is its potency. Inhaling vx vapour disrupts the nervous system within seconds, causing convulsions and suffocation.

North Korea is not known for its squeamishness: this week the South's spy agency reported that the North had conducted yet more executions with anti-aircraft guns, shooting five officials to pieces. Yet spreading its nastiest chemical around a foreign airport is brazen even by the North's standards. (North Korea has not even admitted that the victim was Kim Jong Nam, but has demanded the return of the body without an autopsy and denounced the Malaysian government's version of events as slander.)

The Malaysian authorities say four North Korean men, who have since fled the country, gave the poison to Siti Aisyah, from Indonesia, and Doan Thi Huong, from Vietnam; police said they had been instructed to wash their hands

immediately after the attack in an airport bathroom. The women, who landed in Malaysia within two days of each other, claim that they had been asked to play a prank for a reality TV show; Ms Siti said she had been paid the equivalent of \$90 for the stunt. She had gone out to celebrate her birthday with friends in Kuala Lumpur the night before. Ms Doan is said to have been a failed contestant on a Vietnamese version of Pop Idol, a talent show, before travelling to Malaysia to find work. On March 1st Malaysian prosecutors charged the two with murder.

An attempt was made to break into the morgue where Mr Kim's body is being kept. The Malaysian authorities have not revealed any details, but they have threatened the North's ambassador with expulsion if he continues to "spew lies and accusations" about their investigation. The North, in turn, says "the biggest responsibility" for the furore lies with Malaysia, "for letting one of our citizens die".



Aviation meets suffocation

► suggested that the war would resume.

Mr Duterte is now pushing a bill to reduce the age of criminal responsibility from 15 to nine, and also wants to reinstate capital punishment (formally) for drug-trafficking. These proposals are meeting resistance in Congress, which is also uncertain about autonomy for Muslim areas and lukewarm about tax reform. This week Leila de Lima, a senator and a long-standing critic of Mr Duterte's, was arrested on charges that she ran a drug-trafficking ring

while serving as Mr Aquino's justice secretary. Ms de Lima strongly denies the charges, calling herself a "political prisoner".

The president's erratic character, obsession with drugs and indifference to the rule of law have consumed his first eight months in office. But his term is six years: there is still plenty of time to focus on more worthwhile plans. The millions of Filipinos who elected him to improve their lives will expect no less, even if they, too, are now distracted by the war on drugs. ■

Donald Trump and Afghanistan

A bitter stalemate

Barack Obama had tired of Afghanistan. What will his successor do?

IT MAY be America's longest war, but during his election campaign Donald Trump barely mentioned Afghanistan. When he did, it was somewhat baffling: at one point, he said that America could not pull all its troops out because neighbouring Pakistan had nuclear weapons. As the insurgents of the Taliban prepare for a spring offensive against the American-backed government, there is still no indication of what the new administration's approach will be.

For once, Mr Trump's refrain that Barack Obama left a terrible mess for him to deal with has merit. Mr Obama's policy on Afghanistan seemed driven more by politics at home than by conditions on the ground. He ordered a timely "surge" in American forces when warned by General Stanley McChrystal in 2009 of imminent "mission failure". But he then squandered hard-won gains by reducing troop levels faster than his generals advised, hoping to be able to declare victory and leave in time for congressional elections in 2014. When NATO prematurely called time on combat operations at the end of that year, Afghan forces, far from ready to take full responsibility for the country's security, were left exposed.

Mr Obama further encouraged a resurgent Taliban by suggesting he wanted to end even America's modest training mission before leaving office. However, faced with the possibility that the government might fall to the insurgency if he exercised this so-called "zero option", Mr Obama relented, doing just enough to preserve what has become a miserable stalemate.

An international force of 12,600 remains in Afghanistan, of whom 8,400 are Americans. About 2,500 are special forces who carry out raids against terrorist targets, such as al-Qaeda and the local branch of Islamic State, but not the Taliban. The rest are there to "train, advise and assist" the Afghan security forces, including the police. Under rules of engagement first laid down by Mr Obama and only slightly relaxed last summer, the NATO troops could only come to the aid of their Afghan allies when they were facing a defeat that might have "strategic" implications—a criterion that commanders in the field had difficulty interpreting.

Anthony Cordesman of the Centre for Strategic and International Studies, an author of many critical reports on the conduct of the war, says that too little of the training takes place with forward combat units, where it would be of most use. Close ►►

air support, which was vital for NATO, has dwindled. In 2011 nearly 35,000 combat sorties were flown; in the first ten months of 2016 that had fallen to 4,500. The number of missions to evacuate casualties has dropped from nearly 3,000 in 2011 to none.

The consequences have been dire. In testimony to the Senate Armed Services Committee in February, the American commander in Afghanistan, General John Nicholson, warned that current American troop levels are inadequate to prevent the Taliban from continuing to retake territory, especially in Helmand province, the heartland of the insurgency, and Kunduz. SIGAR (the Special Inspector General for Afghanistan Reconstruction, a post created by Congress) reckons that the proportion of the country under uncontested government control fell during the 12 months to November 2016 from 72% to 57%, although about 64% of Afghans still live in uncontested areas and only 8% in areas fully under the Taliban's control (see map).

The 360,000-strong Afghan security forces are taking a lot of casualties, says General Nicholson. In the year to November, 6,785 were killed and another 11,777 wounded. In 2015 and 2016 combined, 19 Americans were killed in action.

Just to maintain the current deadlock, General Nicholson has asked for "a few thousand" more troops, some of whom he would expect to come from other members of NATO. A further loosening of the rules of engagement and an increase in the air-power available to him would also help. John McCain, the chairman of the Senate Armed Services Committee, told General Nicholson that instead of playing "not to lose", America needed a strategy to defeat the Taliban.

What will Mr Trump do? In keeping with his mantra of "America first", he might conclude that Afghanistan is a hopeless case, with its divided, dysfunctional government and a thriving insurgency that still draws support from Pakistan, a supposed American ally. He could leave the bickering regional powers—Pakistan, India, Iran, China and Russia—to sort it out.

On balance, that seems unlikely. An ad-

ministration that sees countering "radical Islamic extremism" as its overriding strategic priority would find it hard to justify leaving Afghanistan to its fate. The defence secretary, Jim Mattis, is reviewing plans "for a path forward". He and the national security adviser, General H.R. McMaster, both served in Afghanistan. Their instinct will be to recommend that Mr Trump set a bolder objective than Mr Obama was will-

ing to endorse and refrain from setting timetables that ignore military reality.

Even then, Mr Cordesman argues, Mr Trump will also have to pep up Afghanistan's political leaders. Corruption, as much as insecurity, has stymied international efforts to revive Afghanistan's sickly economy. Without some progress on that front, no amount of external military support will kill off the insurgency. ■



The politics of language in Sri Lanka

Crossed in translation

COLOMBO

Monoglot officials are impeding post-war reconciliation

FROM its gleaming new headquarters, Jaffna's police force serves around 100,000 people. The vast majority of the local population are Tamils or Tamil-speaking Muslims; fewer than 50 locals are members of Sri Lanka's biggest ethnic group, the Sinhalese. But the vast majority of the city's 532 police officers are Sinhalese; only 43 are Tamil, and very few of the rest speak the Tamil language well.

This is not just an affront to Tamils, whose complaints about discrimination lay at the root of a 26-year civil war that ended in 2009. It is also a practical problem. Sripathmananda Bramendra came to the new headquarters one day in December to obtain the paperwork needed to replace a lost licence-plate. He waited for hours to talk to a Tamil-speaking officer. But the only one around was first busy with a superior, and then had to rush off to translate at a public protest. Everyone still queuing was told to return the next day.

Roughly three-quarters of Sri Lankans

are Sinhalese; Tamils and Tamil-speaking Muslims make up the remaining quarter. But the population is relatively segregated, with most Tamils concentrated in the north and east. Unlike most officials in the provinces, police are recruited at national level and rotated around the country during their careers (doctors in government hospitals are another troublesome exception). The result is that police stations in Tamil areas are staffed mainly by Sinhalese, who struggle to communicate with the people they are supposed to be protecting. This, in addition to the mistrust bred by the civil war, puts Tamils off joining the police, compounding the problem.

Even after Sri Lanka became independent from Britain in 1948, English remained the language of administration. But in 1956, in an effort to court Sinhalese voters, the prime minister of the day pushed through a bill to make Sinhala the sole official language. For Tamil-speakers in the bureaucracy, the results were devastating. Those



▶ who did not learn Sinhala were denied raises and promotions. Many were forced to retire. The share of Tamils in the bureaucracy fell from 30% in 1956 to 5% in 1970. In the armed forces the plunge was even steeper: from 40% to 1%.

In theory, subsequent changes in the law have restored the status of Tamil, giving it near-parity with Sinhala in all government business. In practice, admits Mano Ganesan, the trilingual minister in charge of implementing the relevant laws, a properly bilingual bureaucracy is decades away. Since 2007 all state employees have been required to achieve proficiency in both Tamil and Sinhala within five years of being hired. But progress is sluggish. In 2015-16 60% of those who passed the required exam did so with the lowest possible score, suggesting that they are far from fluent. Embarrassing errors remain common. Mr Ganesan cites the example of a sign above a bench in a government office that read, in Sinhala, "Reserved for pregnant mothers" and, in Tamil, "Reserved for pregnant dogs".

The Centre for Policy Alternatives, an NGO, tracks violations of the official language policy and, on occasion, petitions the courts to rectify them. In 2014 it secured an order compelling the central bank to print all the wording on new banknotes in Tamil as well as Sinhala. It is now suing to require instructions on medicine to be printed in both languages. More than 100 laws (many of them adopted in colonial days) have not been officially translated into Tamil or Sinhala. Even national identity cards did not become bilingual until 2014, after a legal challenge.

Forms in most public offices in the north are available only in Tamil, and elsewhere in the country only in Sinhala, causing problems for those who cross the linguistic divide. A similar problem applies to the courts, with a shortage of interpreters leading to delays in many cases.

The working language of the Supreme Court is English, but most appeal documents from lower courts are in Sinhala or Tamil, depending on the part of the country in which the case originated. The only Tamil-speaker on the court has just retired; the remaining judges must rely on English translations. The Court of Appeal, which also uses English, is only slightly better off: three of its 12 judges speak Tamil.

Police issue parking tickets and fines in Sinhala. Government circulars are mostly in Sinhala. The immigration department offers forms in three languages, but does not have enough Tamil-speakers to process the Tamil ones. Dial the emergency services, and there is often no one to field calls in Tamil.

Mr Ganesan wants to deploy bilingual assistants in all public offices, strengthen legislation to punish violators of the official language policy, establish a state-of-

the-art complaints centre and even allow parties to lawsuits to request a judge who speaks a particular language. Implementing the language policy properly, he says, "will be the prelude to a political solution" to the Tamil grievances that stoked the civil war. As a recent task-force on national reconciliation noted: "Shortcomings in bilingual language proficiency throughout the machinery of the state were identified in most submissions across the country as a major impediment to reconciliation." The task-force first published its findings in English and later in Sinhala; the Tamil translation is still not ready. ■

An ultranationalist kindergarten

School of shock

TOKYO

Militarist toddlers embarrass Japan's prime minister

EVERY morning the children of Tsukamoto kindergarten stomp their tiny feet in time to military anthems, bow to pictures of the emperor and vow courageously to offer themselves to defend the state. At school functions, the three-, four- and five-year-olds exhort watching parents to protect Japan from foreign threats.

The great-grandparents of Tsukamoto's pupils were once taught similar fare, but state schools toned down the nationalism in the aftermath of the second world war. Until recently few Japanese realised that any private schools were still peddling such jingoism. They were even more surprised to learn that the government seems to have been encouraging them.

Last year Moritomo Gakuen, the firm that runs the kindergarten, bought a plot of

public land in the city of Osaka at a knock-down price—perhaps 14% of its value. It began building a primary school to propagate the same ultranationalist ideas. It invoked the name of Shinzo Abe, the prime minister, when soliciting donations. His wife, Akie, gave a speech at the kindergarten and was named honorary head teacher. Tomomi Inada, the defence minister, sent a letter thanking the kindergarten for raising the morale of Japan's soldiers, after it had dispatched pupils to the docks to welcome returning warships.

Mr Abe denies any involvement in the land sale, and says he will step down if anyone can prove otherwise. He and his wife were badgered into helping the kindergarten, he insists, by its head teacher, Yasunori Kagoike, who had used his name to raise money "despite my repeated insistence he should not do so".

Mr Abe had previously praised Mr Kagoike, however, saying he had an "admirable passion" for education and that they shared a "similar ideology". As scrutiny grows, there are signs of revisionism on both sides: all references to Ms Inada and Mrs Abe have been unceremoniously scrubbed from the kindergarten's website.

Tsukamoto has been investigated under hate-speech laws. It sent notes home to parents referring to Chinese people as *shinajin*—the rough equivalent of "chink". Mr Kagoike's wife, the deputy head, sent a letter to the parent of an ethnic-Korean pupil saying she did not discriminate but "hates Koreans and Chinese".

Moritomo Gakuen is now squirming as much as Mr Abe. Officials in Osaka say the primary school may not receive a licence to operate when construction is completed. There have been fewer applicants than expected. And it has had to change its planned name, to Land of Rice memorial school, from the much grander Prime Minister Shinzo Abe memorial school. ■



Soaking up the jingoism like sponges

Also in this section

24 The spread of anti-smog activism

25 Banyan: Xi, the constrained dictator



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Hong Kong's chief executive

Lam dunk

HONG KONG

Three candidates line up in a rigged race for Hong Kong's leadership

THERE is not much doubt who will be declared the next leader of Hong Kong on March 26th: Carrie Lam, who until recently was the head of the territory's civil service. That is because the Communist Party in Beijing prefers her. The "election committee", which will make the decision, is stacked with people who will bow to the party's will. Far more in doubt is whether Mrs Lam will command public support. Her main rival for the job is trying to show that he has more of it. If he is right, that will matter hugely: Hong Kong will soon get a new leader, but also, very probably, more of the social unrest that has beset a series of unpopular ones.

Three candidates had secured the minimum of 150 nominations that were needed from the nearly 1,200-member committee by the March 1st deadline. Mrs Lam was far ahead of the pack, with 580 backers. The man widely seen as her most credible rival, John Tsang, who was Hong Kong's financial secretary until recently, secured 165. The third, Woo Kwok-hing, a retired judge, got 180 nominations. But most observers expect Mr Woo to be eliminated in the committee's first round of voting.

The Communist Party's support for Mrs Lam as the next chief executive was hinted at when she stepped down in January to compete for the post (she is pictured at the press conference announcing her candidacy). The central government quickly accepted her resignation. It had waited a full

month before agreeing to Mr Tsang's decision last year to resign for the same reason. Earlier this month senior Chinese officials reportedly told a group of Hong Kong grandees that Mrs Lam would be the best choice to succeed the current, widely disliked chief executive, Leung Chun-ying. His successor will take office on July 1st.

It is not clear why Chinese officials are backing Mrs Lam so strongly. "I'm puzzled myself," says Mr Tsang. (He had once been tipped as the favourite by local media, perhaps reading too much into his handshakes with China's leader, Xi Jinping, at international gatherings.) It is possible that the party may worry about Mr Tsang's exposure to the poisonous influence of America, where he lived in his teens and 20s (although Mrs Lam studied in Britain and has two sons and a husband who are British citizens).

More to the point, perhaps, is that Mr Tsang shows a bit too much interest in political reform. He describes the lack of progress with it as a "continual challenge to the government's legitimacy". The central government had offered to tweak the way the chief executive will be chosen this time: members of the public would be allowed to vote, but only for candidates approved by a committee like the current one. Pro-democracy legislators vetoed that plan two years ago. China has refused to countenance any other change.

Mrs Lam, from China's perspective, is a

safer pair of hands. She helped draft the failed plan for electoral reform, and doubtless pleased Chinese officials by showing no sign of wanting to backtrack on it despite weeks of protests, known as the "Umbrella Movement", that erupted in response to the proposal. Mr Tsang has not offered a clear alternative to that plan. But the support he enjoys among pro-democracy members of the election committee will reinforce China's suspicions that he is more of a liberal than Mrs Lam. Almost all of those who nominated him were from the pro-democracy camp. All of Mrs Lam's backers were from the rival one. (The committee is made up mostly of politicians and representatives of industries and professions who are pro-establishment.)

Cut and thrust

Mr Tsang and Mrs Lam have very different personalities. Mr Tsang's social-media accounts show him in sporting poses: in one he is surrounded by young people, whom he is teaching to fence. He uses the tactics of his favourite sport to describe his political style. "I am basically a defensive player...I like coming back from behind." Mrs Lam is less charismatic. She appears uncomfortable meeting members of the public, and remote from their daily lives. She seemed flummoxed by navigating barriers at a train station and admitted that she did not know where to buy toilet rolls.

Mr Tsang has made the transition from bureaucrat to politician with greater ease. He is one of the first contenders for the chief-executive job to ask the public to contribute money to his campaign "instead of getting huge cheques from rich people". He has raised more than HK\$3m (\$390,000) this way. One public-opinion poll, commissioned by the *South China Morning Post*, has put him 14 percentage points ahead of Mrs Lam. Mr Tsang says evidence ►►

▶ of public support for him might encourage members of the committee to back him, too. That is unlikely, except among the minority of members who support greater democracy (some of whom see him merely as the lesser of two evils).

There has been speculation that the Communist Party is so suspicious of Mr Tsang that if he were to win the election it might even prevent him from taking up the post. Last month the territory's first post-colonial leader, Tung Chee-hwa, told an audience in Beijing that the central government would not appoint someone whom it did not trust—a remark that was widely interpreted as referring to Mr Tsang. Mrs Lam similarly raised eyebrows in January when she reportedly told a closed-door meeting that she had decided to run to prevent a constitutional crisis that might arise were someone to win whom the central government refuses to appoint. Mrs Lam later said she was not referring to any particular contender.

Far more likely is a crisis caused by the appointment of someone who is not much liked by the public. Mrs Lam appears to acknowledge this. She said she would face “huge difficulties in governance” if she won the election but another candidate proved more popular. Mr Tsang also sees such a risk. He says that if the election committee chooses someone who is not the public's favoured candidate, that would heighten “people's expectations for universal suffrage”.

China's refusal to allow free elections has fuelled the recent growth of groups demanding greater autonomy, or even outright independence, for Hong Kong. The appointment of another unpopular chief executive would probably boost their support—and increase the risk of further intervention by the central government aimed at silencing them. In November China's rubber-stamp parliament issued a ruling on how Hong Kong's legislators should take their oaths (“sincerely and solemnly”). It was clearly intended to prevent newly elected independence-leaning lawmakers from taking up their seats. Two of them were subsequently disbarred. A court is now hearing the cases of another four lawmakers, who the government says should be expelled for violating the oath-taking rules. They include two who support “self-determination” for Hong Kong.

There are many who oppose the Umbrella Movement campaigners and their localist successors. On February 22nd thousands of policemen joined a rally in support of seven fellow officers who had been jailed for beating an Umbrella Movement protester in 2014. Their unusual gathering is likely to reinforce a sense among pro-democracy activists that the generally well-liked police are becoming less neutral. Mrs Lam—assuming she wins—will take command of a divided society. ■



Anti-smog activism

Choking with fury

BEIJING

Citizens are complaining more loudly about polluted air

THIS time of year can be a tough one for factories in areas surrounding Beijing. To keep the capital's sky clear of smog during the annual session of China's parliament, which begins on March 5th, officials often order polluting firms to close down for several days. This year many are reported to have done so. Such measures, however, do little to calm an anxious public. In recent months, amid persistent dense smog in Beijing and many other cities, alarm and anger have been growing. A few brave citizens are beginning to protest.

It has taken many years for public anxiety to reach this level. A decade or more ago, censors kept talk of smog to a minimum in state-owned media. Worrying about air pollution was largely the preserve of foreigners. Many Chinese netizens scoffed at athletes who turned up in Beijing for the Olympic Games in 2008 wearing air-filtering masks. But the government is now far more open about the hazard, and the public far less blasé. At a children's hospital in Beijing, parents carry toddlers wearing child-sized pollution masks. They fret about their children's lingering coughs—could the smog be the cause? A balloon-seller outside the hospital is sure of the answer. “It is always busiest in the winter since the freezing, dirty air is so hard on the young ones,” she says.

The government takes a dim view of any organised effort to put pressure on it. But in recent months parents in several cities have been posting demands online for the installation of air-filtration systems in

their children's schools. Officials in the capital agreed to do so, but only in some of them. The failure of other cities to respond at all has enraged many parents. “Are the lives of children in Beijing worth more?” asked a Chinese microblogger. In December residents of some cities attached masks to public statues to show their anger (sculptures thus adorned are pictured at Beijing Zoo). In Chengdu, in the south-west, police dispersed a small crowd taking part in such a protest and detained several participants.

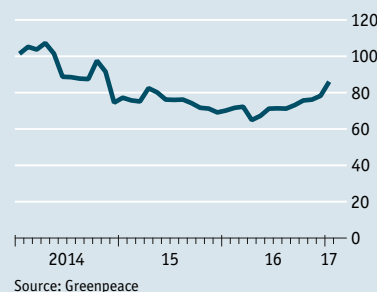
Last month discontent erupted in the north-eastern city of Daqing over plans to build an aluminium factory (such factories are big emitters of particles that cause smog). Thousands gathered outside the city government's headquarters, many holding up signs saying “refuse pollution”—even though the authorities had already agreed to suspend the project. Citizens of Daqing have cause to be sceptical: in November state media said officials there had failed to issue a red alert when lung-invading particles, known as PM2.5, exceeded a particularly hazardous level. Such alerts annoy local officials because they require the closure of factories and schools, and measures to curb traffic.

Some anti-smog activists are turning to the courts. The first known attempt to do so was in 2014, when a man in Hebei province, which surrounds Beijing, demanded compensation for smog-related costs such as air-purifying machines, face masks and the purchase of exercise equipment for use indoors because of the foul air outside. The case was unsuccessful, but it attracted sympathetic coverage in state media. Recently a group of lawyers filed a suit against the city government in Beijing, alleging it was not doing enough to keep the air clean. The plaintiffs say officials have been warning them to withdraw it. The court has not yet responded. “All of us living in northern China are victims. This is a personal issue,” says one of the lawyers.

As state media admit, smog is likely to be a topic that is much discussed at the 12-day parliamentary session. The forecast for its start: haze. ■

Worse again

Air pollution, Beijing-Tianjin-Hebei region
Monthly average PM2.5 concentration, micrograms per m³



Banyan | The constrained dictator

Is China's president the new Deng Xiaoping?



A POPULAR song about Xi Jinping, China's president, begins "From China comes Papa Xi". It is a deliberate echo of an anthem of the Cultural Revolution that begins "The East is Red. The Sun is rising. From China comes Mao Zedong."

The idea that Mr Xi has Mao-like attributes is common currency. The manifesto of America's Republican Party, which Donald Trump professed to espouse when he was campaigning for the presidency last year, talks about China's "return to Maoism" and its "cult of Mao revived". *The Economist* has illustrated its cover with a drawing of Mr Xi in a Mao suit, albeit with the reservation that "Xi is no Mao". Now the doyenne of American academic China-watchers, Alice Miller of Stanford University's Hoover Institution, has proposed an alternative comparison. In an article for Hoover's online journal, *China Leadership Monitor*,* she argues that Xi's model is not Mao, but rather Deng Xiaoping.

Ms Miller makes short work of claims that Mr Xi is Mao 2.0. The late chairman said he wanted to create "great disorder under heaven". Mr Xi, by contrast, is a control freak. Mao believed that "class struggle" could lead China to a communist paradise within a matter of years. Mr Xi says that the Communist Party will turn China into a "moderately prosperous" country by 2021—a century after the party's founding. Mao thought Red Guard mobs were needed to discipline the party. Mr Xi says the party's own anti-corruption body should do that.

There are, however, a number of intriguing parallels with Deng. Mr Xi's official anthology, called "The Governance of China", has far more references to Deng's speeches than to Mao's. The book mentions Deng's appeal in 1992 for the creation of a "socialist market economy" (ie, capitalism under the party's thumb). Mr Xi says that is what he wants, too. In 2016 Mr Xi updated one of Deng's early reforms aimed at ending the intraparty strife of the Mao era: a set of rules telling party members how to treat one another. To Ms Miller, this is more than just posturing. She believes that Mr Xi wants a new campaign for economic reform matching in scale and importance the one that Deng brought about. It might be added that Mr Xi is ruthless in using force against perceived threats to the party, as was Deng—the reformist who ordered troops to kill pro-democracy demonstrators around Tiananmen Square in 1989.

But the differences between Mr Xi and Deng are at least as great as those between China's current leader and Mao. Deng could be bracingly pragmatic. "It doesn't matter whether a cat is black or white," the party's great survivor once said, "so long as it catches mice." Mr Xi prefers to talk like a traditionalist. One of his first acts after taking over as party chief was to set up a National Ideology Centre to inculcate Marxist wisdom in party members. He has also endlessly lectured universities about the need to put Marxism at the centre of university life. Deng's pragmatism was evident in his approach to corruption. He tolerated a modest amount of it among officials—a way of boosting morale after the purges and denunciations of the Mao era. Mr Xi sees corruption as an existential threat to the party: his campaign against it has resulted in about 750,000 people being charged with graft over the past three years.

The way Mr Xi wields power is distinctive, too. Deng tried to set up a system of government in which institutions were supposed to matter more than the people in them, and in which term limits ensured leaders did not stay too long in power. Mr Xi is more of an autocrat. He has gathered more formal power to himself than any of his predecessors, and has been far more reluctant than Deng was to delegate responsibility to subordinates.

It is too much of a stretch to suggest, as Ms Miller does, that Mr Xi and Deng are equally committed to economic reform. Ms Miller says that impatient observers should "take a long view". When he unveiled his plans for economic reform in 2013, Mr Xi called for "decisive breakthroughs", while allowing seven years for them to be achieved. Consider Banyan too fretful, but more than half that time has gone by with little to show for it. Should not more reforms be in place by now?

As Ms Miller points out, Mr Xi does not try to portray himself as something new. He prefers to be seen as the latest in an unbroken line of Communist leaders, going back to Mao. Mr Xi criticises historians who portray the party's rule as divided into a Maoist era and a Dengist one. He clearly worries that such an idea will encourage people to see the two periods in contrast with each other, and conclude that the Mao days were distinguished by their chaos and cruelty. That would undermine Mao's legitimacy as the founder of the People's Republic, and therefore the legitimacy of the party itself.

Not the almighty

When Mr Xi took over, it was not as a result of a grab for power, driven by a desire to change things. He had been groomed for years for those posts. Ms Miller calls him the embodiment of a "broader elite consensus". Many of the policies associated with him began during the latter years of his wooden predecessor, Hu Jintao. It was Mr Hu who began the crackdown on civil society that Mr Xi has expanded. Steps to reconcentrate authority in the central leadership began under Mr Hu, too.

Mr Xi is often described as the most powerful Chinese leader since Mao. Yet there are limits to his freedom of action. The broad aims of his leadership—including that of asserting China's power abroad more robustly—were set before he took office. The decisions and arguments that have occurred under him have had more to do with the pace of change than the overall direction—with means, rather than ends. Mr Xi is a dictator, but he is a strangely inhibited one. ■

*"What would Deng do?" by Alice L. Miller. *China Leadership Monitor*, Issue 52, 2017.



Also in this section

28 The president's budget

29 Nuclear weapons

29 Anti-Semitism

30 Arguing about Los Angeles

31 Lexington: Leading v cheerleading

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Regulation

Grudges and kludges

WASHINGTON, DC

Too much federal regulation has piled up in America. Fixing the problem requires better institutions

IF REPUBLICANS in Congress unite behind Donald Trump's agenda, it will not be because they have changed their views on economics. Whatever Mr Trump's plans for border taxes and fiscal stimulus, most Republicans still profess to support free trade and loathe government borrowing. Instead, unity is possible because two other goals bind the president and his party together. The first, tax cuts, is a usual priority for the party. But the second, deregulation, only recently rose to the same status. The call to cut red tape is now an emotive rallying cry for Republicans—more so, in the hearts of many congressmen, than slashing deficits. Deregulation will, they argue, unleash a “confident America” in which businesses thrive and wages soar, leaving economists, with their excuses for the “new normal” of low growth, red-faced. Are they right?

The straightforward motivation for Republicans' deregulatory agenda is their disdain for President Barack Obama's legacy, much of which was installed through regulatory fiat. The Affordable Care Act, better known as Obamacare, required bureaucrats to write thousands of pages of new rules; the Dodd-Frank financial-reform bill did the same. When legislation was not forthcoming, the executive branch threw its weight around instead. It asserted that the Clean Air Act gave it wide-ranging powers to fight climate change, and that the Clean Water Act let it clean up many more ponds and rivers than ever before. It

expanded mandatory overtime pay for workers on low salaries. It banned telecom firms from favouring any one type of internet traffic. And its “fiduciary rule”, set to come into force in April, will force investment advisers to act in the best interests of their clients.

Republicans hate all this, saying Mr Obama's fondness for red tape has crushed the economy. His regulations were, on the whole, bigger and bolder than what had come before. They caused ire on the right—and among bankers and polluters. Sometimes they rested on uncertain legal ground. The Clean Power Plan has been delayed by the courts and may yet be struck down (Mr Obama's old constitutional law professor, Laurence Tribe, is among its critics). The structure of the Consumer Financial Protection Bureau, a new agency set up by Mr Obama, may yet be found unconstitutional. The so-called “administrative state” has plenty of critics who worry more about the growing power of the executive than about the particular ends Mr Obama pursued.

America's underlying regulatory problem long predates the 44th president. Between 1970 and 2008 the number of prescriptive words like “shall” or “must” in the code of federal regulations grew from 403,000 to nearly 963,000, or about 15,000 edicts a year, according to data compiled by the Mercatus Centre, a libertarian-leaning think-tank. Between 2008 and 2016, under Mr Obama, about the same number of

new rules emerged annually.

The unyielding growth of rules, then, has persisted through Republican and Democratic administrations (see chart). Several factors explain it. First, Congress has neither the staff nor the expertise to write complex, technical laws. So lawmakers happily let experts in government agencies fill in the blanks. What Congress does write itself, it writes sloppily. In 2015 the Supreme Court found “more than a few examples of inartful drafting” in the Affordable Care Act. One such error nearly saw the court strike down crucial parts of law; only semantic gymnastics saved it. The “Chevron deference”, a doctrine from a 1984 court ruling, gives agencies wide latitude to interpret laws when they are vaguely written. (Neil Gorsuch, Mr Trump's nominee to the court, is not a fan.)

Second, America's division of powers makes it easy for interest groups to defend any one regulation, tax break or policy. That forces administrations to solve problems by taping yet more rules onto whatever exists already, rather than writing something simple from scratch. Over time, this gums up the system, resulting in what Steve Teles of Johns Hopkins University has dubbed a “kludgeocracy”. This explains, for instance, why over half of Americans have to pay a professional to fill out their tax return for them (in Britain, for comparison, most people need not even complete one).

Mr Obama's regulations were kludgy. The Clean Power Plan, which forces specific emissions reductions on power plants, emerged after Congress failed to pass a cap-and-trade scheme. Unable to raise the federal minimum wage, the administration did what it could to boost wages with a reboot of an old overtime rule. (This clumsily mandates that workers on low salaries must get a 50% wage bump for work in excess of 40 hours a week, creating ►►

▶ strange incentives for firms to add staff rather than breach the threshold.) Unified government does not stop kludges. Dodd-Frank, passed in 2010 when Democrats controlled Congress, micromanages banks' balance-sheets rather than imposing exacting but simple capital standards.

Bureaucrats, busted

Yet the most important explanation for the proliferation of rules concerns the habits of Washington's bureaucracy. It has for decades been bad at rubbing out old ones.

When a government agency writes a significant regulation—mostly defined as one costing more than \$100m—it must usually prove that the rule's benefits justify its costs. Its analysis goes through the Office of Information and Regulatory Affairs (OIRA), a nerdy outpost of the White House. The process is meticulous. The OECD, a club of mostly rich countries, finds that America's analysis of regulations is among the most rigorous anywhere.

But once a rule has cleared the hurdle, there is little incentive for agencies ever to take a second look at it. So it is scrutinised only in advance, when regulators know the least about its effects, complains Michael Greenstone, of the University of Chicago. The OECD ranks America only 16th for "systematic" review of old red tape. (The leading country, Australia, has an independent body tasked with dredging up old rules for review.)

Politicians of all stripes realise that America has fallen behind. Mr Obama ordered agencies to trawl for anachronistic regulations and report on their progress twice a year. This produced some results. For example, in 2014 the Department of Transportation scrapped a rule requiring truck drivers to file a report on condition of their vehicle before and after every trip, even when they found no faults. The change supposedly saved the industry \$1.7bn. But the deregulatory charge lost some momentum in Mr Obama's second term, after Cass Sunstein, its champion, left his post as head of OIRA. Critics contend that agencies ended up using the clear-out as another excuse to write new rules.

The endless pile-up of regulation enrages businessmen. One in five small firms say it is their biggest problem, according to the National Federation of Independent Business, a lobby group. (Many businessmen grumble in private about the Obama administration's zealous regulatory enforcement.) Based on its own survey of businessmen, the World Economic Forum ranks America 29th for the ease of complying with its regulations, sandwiched between Saudi Arabia and Taiwan.

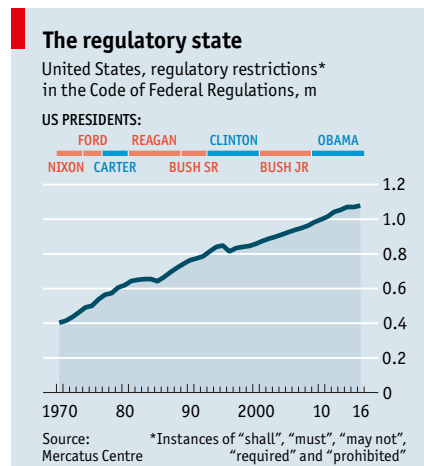
Regulators retort that firms' complaints reflect only one side of the ledger—costs—and ignore the benefits that flow from, say, greater protection for consumers. For example, Mr Sunstein has argued that the

Obama administration was an unusually good regulator, because the estimated net benefits of new regulations in his first term were more than twice what either George W. Bush or Bill Clinton achieved in theirs.

But totting up costs and benefits is hardly straightforward. An agency which supports a regulation can obviously nudge the numbers in a favourable direction. Bureaucrats must sometimes make value judgments. For instance, the Obama administration counted benefits to foreign countries when weighing up rules to reduce carbon emissions.

In any case, cost-benefit analysis ages badly. Without updating it, it is difficult to know how much old regulations weigh on the economy. One Mercatus working paper plugs the number of rules in each industry into a complex model of the economy. It finds that rules written since 1980 have dampened growth by about 0.8 percentage points a year.

Republicans like to put about that sort



of figure, but it strikes many economists as implausibly large. Even those sympathetic to deregulation, like Glenn Hubbard, who worked in Mr Bush's White House, are hesitant to forecast the growth effects of a regulatory bonfire, preferring to stress the benefits of tax cuts. Democrats, meanwhile, are scathing about the idea that rolling back regulations would pep up the economy much. Jason Furman, who advised Mr Obama, adds up the costs of Obama-era rules and says it is "impossible" to see how you would add even a tenth of a percentage point to growth by undoing them. (The Trump administration promises growth of 3.5-4%, up from 1.6% in 2016, partly on the back of deregulation.)

Yet regulation does cause some visible problems. Infrastructure projects are frequently bogged down in endless environmental reviews and consultations. An example is a project to upgrade the Bayonne Bridge, which spectacularly arches between Staten Island and New Jersey. Elevating the road so that bigger cargo ships

could pass underneath required 47 permits from 19 different government entities, according to Philip Howard, a legal writer. Regulators demanded a historical survey of every building within two miles of the bridge, even though the project affected none of them. It took from 2009 to mid-2013, when building at last began, to satisfy all the regulatory requirements.

And that is unusually quick. Big highway projects approved in 2015 took an average of a decade to clear every bureaucratic hurdle, according to one study. It is little wonder that Mr Obama struggled to find "shovel ready" projects to kick-start with stimulus funds after the financial crisis. (Any infrastructure push by Mr Trump will probably run into the same problem.)

Regulation can also impede innovation in ways that are hard to foresee. In 1973 the Federal Aviation Administration (FAA), worried about loud sonic booms, banned civil aircraft from flying at supersonic speeds above America. But planes are now lighter, more aerodynamic, and contain more efficient engines, explains Eli Dourado of Mercatus. That makes them quieter. With start-ups trying to build commercially viable supersonic jets, Mr Dourado thinks the FAA should replace the ban with a maximum permissible noise level. The FAA has acknowledged the case for change, but it moves slowly.

Playing the long game

Detangling America's regulatory mess requires institutional change. It does not require tearing up Mr Obama's legacy. That, however, is what Republicans are focused on. By law, Congress, with Mr Trump's consent, can overturn any rules that were written late in Mr Obama's time in office—in this case, after June 2016. It has already scrapped a requirement that energy and mining companies disclose any payments they make to foreign governments. It has also blocked a ban on people deemed mentally unfit to manage their own finances from buying guns. The president has ordered a review of the Dodd-Frank law, which regulates the financial industry, and has advised public schools that they need not adhere to an Obama missive advising them to allow transgender pupils into the lavatory of their choice, or face losing their federal funding.

Yet there is some impetus towards long-term regulatory reform. Mr Trump has also signed an executive order requiring that for every new rule regulators write in 2017, they must scrub out at least two old ones, and eliminate as many regulatory costs as they have imposed. Critics say this will arbitrarily halt good regulation that passes a cost-benefit test. But it does at least provide some incentive for agencies to revisit their past decisions. Britain has had a similar system since 2011. Its "one-in, one-out" requirement, which has since grown to ▶▶

▶ “one-in, three-out”, has unearthed some barmy rules, such as a requirement that people working for themselves at home should follow workplace health-and-safety laws. (Mr Trump’s policy lacks some of the finesse of Britain’s, which lets regulatory costs in one department be offset by regulatory savings in another.)

When they get around to institutional reform, Republicans in Congress will seek more power over regulators. One proposal would ensure a congressional vote on every significant new rule. Another would make it easier to challenge cost-benefit analyses in court. This worries wonks. Congressmen have neither the time nor the expertise to evaluate most regulations properly, argues Philip Wallach of the Brookings Institution, a think-tank. Enabling politicians or interested parties to block rules they dislike risks making policy more kludgy. In America’s lawmaking, Mr Teles argues, veto-points function as toll booths, at which proponents of a law must write in yet another complicated carve-out or handout.

Instead, Congress could beef up the institutions which scrutinise cost-benefit analysis away from the heat of politics. The obvious place to start would be OIRA, which has seen its budget fall by a quarter and its staff halved over the past three decades, even as the regulation it must scrutinise has proliferated.

Yet OIRA will always be under the command of the White House. So others argue that Congress should create an independent agency to scrutinise regulations on its behalf. It could be modelled on the Congressional Budget Office (CBO). Widely respected for its independent analysis, the CBO increases the ability of Congress to scrutinise the budget. A congressional regulatory agency could do the same for regulation, and could also continually recommend old regulations for the chop.

Better institutions would not solve all America’s regulatory problems. And some over-regulation, like zoning requirements that stop successful cities from expanding, is the fault of state governments. About a quarter of American workers require an occupational licence to do their jobs, in part because states have a foolish habit of outsourcing regulation to those who have an incentive to make it harder to enter their profession. States must fix such problems themselves.

It is clear, however, that the federal government should keep asking itself whether each of its vast number of rules is really necessary. If Republicans can see past their dislike of Obama-era policies and focus on a bigger prize—root-and-branch reform of the regulatory system—the economy will surely benefit. Whether the gains will be large enough to justify tolerating the more damaging parts of Mr Trump’s economic agenda is another matter. ■

The budget

Ten-penny plan

WASHINGTON, DC

The White House proposes eye-watering budget cuts

DURING his campaign for the White House, Donald Trump touted a “penny plan” for government spending. This meant cutting the part of the budget that funds day-to-day operations—ie, excluding Social Security, health care, debt interest or defence—by 1% a year. Critics said such cuts were unachievable. Department budgets are already beneath their historical average as a share of the economy. They would have to shrink by nearly a third over a decade, after accounting for inflation, to satisfy the penny plan.

That has not deterred Mr Trump. On February 27th the White House announced its headline budget numbers, ahead of a more detailed plan due soon to appear soon. In his first year in office, Mr Trump is proposing to cut so-called “non-defence discretionary” spending not by 1%, but by more than 10%, relative to current law. The \$54bn (0.3% of GDP) this would free up would flow to the defence budget (see next story).

Cue incredulity. The part of the budget Mr Trump would cut, which funds things like education, housing and national parks, has already fallen by over 10% in real terms since 2010. Strict spending limits in the Budget Control Act of 2011, sometimes called the “sequester”, caused the dive. These kicked in automatically after Congress failed to pass a more palatable plan to bring down deficits. The sequester was supposed to be so severe that lawmakers would have to strike a deal to avoid it. Cutting budgets by a further 10% would be painful. The White House wants the State Department and foreign-aid budgets to



Bean counter in chief

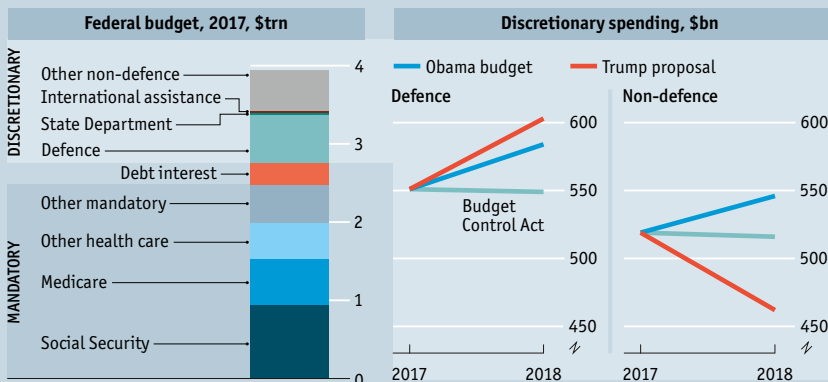
bear much of the burden. But these make up only a small proportion of the federal budget: about \$57bn in total (see chart).

The sequester also cut defence spending deeply, which is why hawks like Senator John McCain have been questioning America’s military preparedness. Barack Obama’s last budget proposed a boost to defence spending about two-thirds as big as Mr Trump’s (see chart). A recent paper by Mr McCain argues that an additional \$54bn is needed on top of Mr Obama’s figure—for a total boost of \$91bn, compared with the sequester.

Congress can usually write budgets with a simple majority in both houses. But amending the sequester may require 60 votes in the Senate, and hence bipartisan co-operation. (This happened in 2013 and 2015.) Democrats will never support cuts on the scale Mr Trump seems to want. Plenty of Republicans, too, worry about cuts to the State Department. Mick Mulvaney, Mr Trump’s budget chief, says that he is under no illusions about the budget’s prospects in Congress, recalling that Republicans paid little attention to Mr Obama’s proposals. The budget, he says, was not written for Congress, but for the people. ■

Just a sliver

United States



Nuclear weapons

Assured destruction

A bigger defence budget would be eaten up by a nuclear arms race

THE budget plan Donald Trump will send to Congress, proposing to boost defence spending by \$54bn next year, is less transformative than the president appears to believe. As John McCain, the chairman of the Senate armed services committee, swiftly pointed out, the 10% increase is about \$19bn more than forecast by the outgoing Obama administration (out of a total annual spend of close to \$600bn). It would not provide anything like enough money for the 350-ship navy, additional fighter planes and extra troops for both the army and the marines that Mr Trump has called for. And it would certainly not pay for the new nuclear arms race that the president has also suggested he favours.

Mr Trump wants to slash spending on soft power. Cuts to the State Department's budget and foreign-aid programmes would reduce America's influence in the world and undermine the civil side of stabilisation missions—for example, the rebuilding of Mosul after Islamic State has been kicked out—against the advice of some of his own cabinet. The defence secretary, James Mattis, while giving testimony to Congress in 2013 when he was running Central Command, warned: "If you don't fund the State Department fully, then I need to buy more ammunition."

The overall goal of stronger armed forces also risks being undermined by what looks like a willingness to trigger a new nuclear arms race. It has emerged that in his hour-long telephone call with Vladimir Putin on January 28th, the Russian president suggested extending the New START strategic arms-reduction treaty by five years after its expiry in 2021. Mr Putin may have seen this as something relatively uncontroversial that could help unfreeze relations between the two countries—something Mr Trump frequently says he wants. It seems that the president may not have known what his opposite number was referring to. But, after pausing the conversation for advice, he resumed it with a tirade against New START, describing it as a typical example of a bad Obama-era deal.

In an interview with Reuters on February 23rd, Mr Trump doubled down: "It's a one-sided deal. It gave them things that we should have never allowed...whether it's START, whether it's the Iran deal...We're going to start making good deals." Mr Trump added that although he would love to see a world without "nukes", America had "fallen behind on nuclear-weapon ca-

Anti-Semitism

Past and present

UNIVERSITY CITY, MISSOURI

An ancient prejudice returns

MORE than 150 tombstones were toppled or damaged at Chesed Shel Emeth ("The truest act of kindness"), a Jewish cemetery in University City, Missouri. At the Mount Carmel Jewish cemetery in Philadelphia, between 75 and 100 were smashed. According to David Posner of the Jewish Community Centre (JCC) Association, 31 threats were made against 23 JCCs and eight schools in 15 states and a Canadian province on a single day in February. This was the fifth wave of such threats since the start of the year. "The threats were hoaxes, but the calls were not," says Mr Posner. All 31 schools and centres had to be evacuated.

In his speech to Congress on February 28th, Donald Trump condemned the attacks. Mike Pence visited University City a few days earlier to inspect the damage for himself. Yet plenty of people blame the president for what is happening. When campaigning, Mr Trump condoned thuggery and was slow to disown support from white supremacists. The Southern Poverty Law Centre, a watchdog, counted 867 racist incidents, some of them amounting to crimes, in the first ten

days of Mr Trump's presidency, dubbing this "the Trump effect". When his administration forgot to mention Jews in a statement issued on Holocaust memorial day, neo-Nazi websites celebrated, claiming that the White House had been taken over by Holocaust-deniers.

Steven Goldstein, of the Anne Frank Centre, says the president needs to do more to stop the desecration and the threats. Jonathan Greenblatt of the Anti-Defamation League thinks the Justice Department should launch an investigation into the bomb threats, set up a federal task-force on fighting hate and increase efforts to fight hate speech online and in schools. "We are navigating uncharted waters," says Mr Greenblatt, citing anti-Semitic invective on social media.

Yet to be American and Jewish in 2017 is also to be admired. A study by the Pew Research Centre found that Jews are the most popular religious group in America, edging out Catholics and evangelical Christians and much better liked than either Muslims or atheists. Both contenders for the presidency last year have a Jewish son-in-law (Mr Trump's daughter converted to Judaism before her marriage). Isaac Herzog, an Israeli opposition leader, has called on his government to draw up a national emergency plan to prepare for a massive influx of diaspora Jews from America and France. He may be waiting a while.

Just over a week after the vandals attacked, a tour of Chesed Shel Emeth reveals volunteers repairing and cleaning large tombstones in what was once a very Jewish suburb of St Louis. Two Muslim-American activists, Linda Sarsour and Tarek El-Messidi, launched a crowdfunding campaign for the cemetery with a goal of \$20,000. It had raised \$150,000 by March 1st. This is likely to be more than is needed to repair the damage at the cemetery. Mr El-Messidi, who lives in Philadelphia, says the extra funds raised will help to repair his city's vandalised cemetery, too.



2017 contd.

capacity". He would ensure its return to "the top of the pack".

Strategic arms-control agreements between America and Russia (as the former Soviet Union) stretching back to 1972 have been based on negotiating equal reductions, with the aim of ending up with rough parity between the nuclear forces. The New START treaty, which came into force six years ago, was no exception. It lim-

its both sides to no more than 1,550 deployed strategic warheads on a maximum of 700 deployed missiles (land- and submarine-launched) and nuclear bombers. Far from being one-sided, New START is firmly in America's interests. Steven Pifer of the Brookings Institution, a think-tank, notes that the treaty was not only unanimously supported by the joint chiefs of staff, but was also endorsed by seven for- ▶▶

mer heads of Strategic Command.

Apart from capping the number of warheads aimed at America, the treaty provides a trove of information about Russia's forces. It allows for 18 on-site inspections in Russia every year, detailed data exchanges every six months and a stream of mutual notifications (nearly 13,000 since 2011). While the treaty allows each side to modernise its nuclear forces, the transparency it brings means both can do so without making what Mr Pifer calls "costly worst-case assumptions".

Should Mr Trump decide to pull out of New START, the likely consequence would not be America racing to the "top of the pack" but a Russian advantage for most of the next decade. Russia is at a later stage in its nuclear modernisation cycle: its production lines for new missiles and ballistic-missile submarines are already humming.

America's will take several years to crank up. As things stand, America's nuclear modernisation plan was forecast earlier this month by the Congressional Budget Office to cost \$400bn up to 2026. Finding the money will be difficult anyway. But a wholly unnecessary and dangerous new nuclear arms race would mean either giving up on conventional military capabilities, more borrowing, or raising taxes.

A nuclear issue which does require the president's attention is the recent report that Russia has fielded a cruise missile that violates the 1987 Intermediate-Range Nuclear Forces treaty. The INF treaty permanently bans both countries from deploying ground-launched missiles with ranges of between 500 and 5,500 kilometres. However, noisily rubbishing New START is precisely the wrong way to restore Russian compliance with the INF. ■

middle class neighbourhoods to say, 'We don't like what's happening'."

Growth-wary Angelenos have long been successful at swaying city planners. After decades of rapid development, homeowners campaigned for influence over land use in the 1960s. Given more control over zoning in 1969, they used it to push for curbs on density. The slow-growth movement continued into the 1980s. In 1986 Proposition U moved to limit the construction of high-rise buildings and cut by half the allowable size of most new commercial buildings beyond downtown. Voters supported it, two to one. Writing in the *Los Angeles Times* in 1987, its backers explained: "We're tired of the overdevelopment, the excessive traffic and the inadequate planning that are increasingly plaguing the people of Los Angeles."

The Measure S camp expresses nearly identical concerns today, shuddering at the "Manhattanisation" of the city. The Los Angeles metropolitan area, which includes the cities of Long Beach and Santa Ana, is the densest in the country. But the city itself is far less dense than other comparably sized cities. It has a mere 8,474 people per square mile; New York has more than 28,250. As of 2014, nearly half the city was zoned for single-family housing.

This is in large part the result of shifts in zoning rules over the past 50 years. In 1960 Los Angeles had a population of 2.5m and a capacity for 10m residents. By 2010 the city's population had swelled to nearly 4m, but zoning and legislation had reduced its capacity to 4.3m. Increasing density is the only way out (other than pestilence, or a crime wave, perhaps), but weaning Angelenos away from single-family housing will be tough. "A good place to start is for politicians never again to utter the words 'preserve neighbourhood character'," says Jan Breidenbach of the University of Southern California. "In reality what they're saying is, 'Keep out'." ■

Los Angeles

Dense as in smart

LOS ANGELES

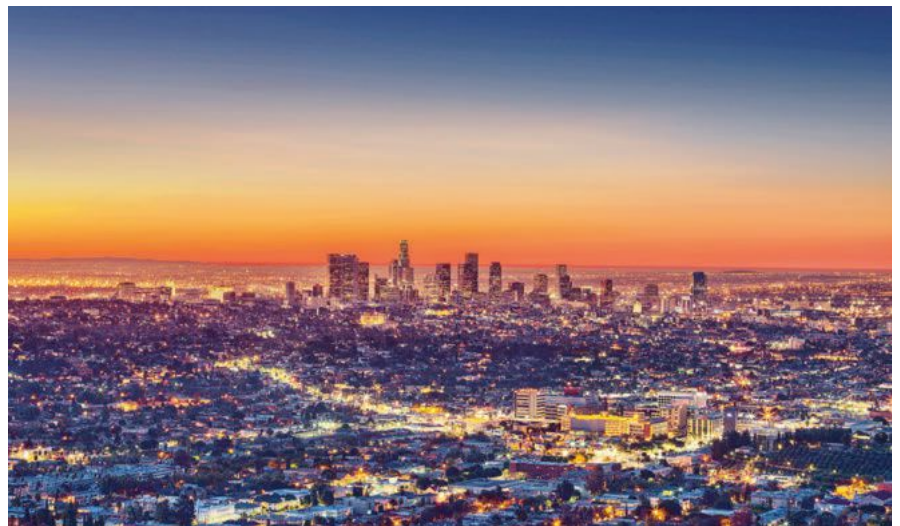
When homeowners are given vetoes over development, they prevent it

CURTIS HOWARD, an ex-serviceman and former truck driver, received a startling piece of post at his San Fernando Valley apartment recently. "EVICTION NOTICE" it read in red capital letters. "You are ordered to vacate the premises described in the writ no later than 3/07, 2017." Mr Howard had been homeless for several years before landing at Crest Apartments, a new affordable-housing project in Van Nuys, where he pays \$60 a month. His stomach sank at the prospect of moving back to the streets. When he scrutinised the notice more closely, he realised it was fake. The paper was actually a campaign mail-out for Measure S, a proposal that will appear on ballots in Los Angeles on March 7th along with choices for the city's mayor.

Also known as the "Neighbourhood Integrity Initiative", the measure would pause construction on projects that require exemptions from existing rules on zoning and height for two years. It would also prohibit spot zoning, where changes are applied to small parcels of land. Proponents of the initiative oppose a mixed-use complex in West Los Angeles that would replace a car dealership, and a squiggly Frank Gehry-designed project in West Hollywood, among others. Those on the other side of the argument, who include the mayor, Eric Garcetti, say the measure would affect most new development in the city. During a recent campaign event held at the Crest Apartments, Mr Garcetti cautioned that of the 12 building sites the city

has identified for low-income housing, 11 would be blocked if Measure S passes.

This is just the latest in a long string of tussles over how the City of Angels should grow without sacrificing its low-rise feel. "People who live in Los Angeles have a hard time coming to terms with the fact that they live in the second-largest city in the country. They like being in a city that feels like a suburb," says Richard Green, at the University of Southern California. Joel Kotkin of Chapman University, who recently left Los Angeles because of congestion, sees Measure S as a "last attempt by



Zonal defence in action

Lexington | Leading v cheerleading

Why do most Americans seem sure that the president is keeping his promises?



DONALD TRUMP'S presidency contains a puzzle. Opinions of the new president are remarkably clear-cut. Nine in ten of those who voted for him last November say they approve of his performance. Interviewed face-to-face, Trump supporters hail him for that rarest of political feats—doing in power just what he said he would do when campaigning. He has staged daily shows of action and resolve; scolding silver-haired CEOs to bring back jobs; signing executive orders to review and eventually repeal what he calls “job-killing” regulations, flanked by farmers or coal miners in hard hats. The heart of his first formal address to a joint session of Congress on February 28th was the line: “Above all else, we will keep our promises to the American people.”

Mr Trump's opponents also seem sure that he is keeping his promises, albeit to their horror. More than nine in ten of Hillary Clinton voters say they disapprove of his presidency. Many predict his swift impeachment and demand “resistance” to all he does, an overwrought choice of word, implying that Democrats who work with him are treacherous collaborators. The resignation of Michael Flynn for lying about his contact with the Russian ambassador, and the forgetful testimony of Jeff Sessions, the attorney-general, in his confirmation hearing, have fed this sense that they are confronting a well-organised conspiracy.

For all that certainty in the country at large, the president remains a figure of sphinx-like mystery to those trying to work out what his government is actually doing. On the day of the big speech farmers and house-builders gathered in the White House to watch Mr Trump sign an executive order that he said paved the way for the elimination of a “very disruptive and horrible” rule, known as Waters of the United States (WOTUS), which aims to define which streams, small rivers and other waterways are subject to federal pollution controls. “It's truly run amok,” said Mr Trump, suggesting at the signing that the rule has cost “hundreds of thousands” of jobs. In fact the rule was issued only in 2015 and has spent most of its short life suspended by court order. In a further touch of smoke and mirrors, Mr Trump's order does not kill WOTUS but merely sends the issue back for review.

Or take immigration. Hours before his address to Congress, the president told TV anchors over lunch that “the time is right” for an immigration bill offering a pathway to legal status for for-

eigners who have committed no serious crimes—a proposal that his most fervent supporters would normally scorn as “amnesty”. But his speech made no mention of that approach, instead asserting: “We've defended the borders of other nations while leaving our own borders wide open, for anyone to cross”—though spending on border defences has more than doubled since 2001.

One of Mr Trump's few tangible acts since taking office has been to issue instructions to federal agents that give them greater latitude to deport migrants encountered without papers, if they have been arrested for even minor crimes. Though he spoke soberly to Congress, Mr Trump harked back to his campaign rhetoric when he mentioned four guests in the House gallery whose relatives were “viciously” killed by illegal immigrants. He further announced the creation of a new government office tasked with reporting on crimes committed by immigrants. To be known as “Victims Of Immigration Crime Engagement” or VOICE, he declared that it will provide a platform for crime victims “who have been ignored by our media, and silenced by special interests.”

Though he offered some detail on this matter, Mr Trump left how he will shepherd his main plans through Congress, or pay for them, vague. He did not mention balancing the budget. He offered no guidance on fiscal questions that split Republicans down the middle, such as whether to support a border-adjustment tax on imports. The president came close to backing the replacement for Obamacare being proposed by Republican leaders in the House of Representatives. But he dodged the trade-offs involved, instead promising, regally, to “expand choice, increase access, lower costs and at the same time provide better health care.”

The puzzle, then, is why so many Americans are so sure that Mr Trump is keeping his promises. The solution lies in the president's unusual relationship with his supporters. He was elected on grandiloquent pledges to “bring the jobs back” and build a “great wall” on the Mexican border that will stop people, drugs and crime. Those promises were really a commitment to be a champion for his supporters. Mr Trump can be hazy about what he plans to do because he is so clear about whom he represents: those he calls “forgotten” Americans, defined as hard-working, law-abiding heartland folk. And every time the news shows him signing some executive proclamation, the image carries almost as much messaging-power as a bill that took years to pass.

The man in the arena

If the president's tone when addressing Congress felt more presidential than usual, it is because Mr Trump's rhetoric expanded that in-group—those for whom he governs—to take in all Americans. Properly, he began his speech by condemning anti-Semitic attacks and an apparent hate crime in Kansas City, involving a white man accused of shooting dead an Indian-American engineer, while shouting “Get out of my country.” Later in the address, listing those ignored by elites, Mr Trump cited inner-city children from such diverse cities as Chicago, as well as the miners and factory workers of whom he usually speaks. All menaces can be beaten once America puts “its own citizens first”, he declared.

Broad-brush nationalism is better than the narrow tribalism Mr Trump often peddles. His great strength is his sense of his target audience, and of how those Americans see the world. But that is a strength more suited to campaigning than governing, and he takes power after making many impossible promises. Soon events will trigger hard choices. Mr Trump will have to lead, not just cheerlead. He has not yet shown he has that in him. ■



Canada's Conservatives

Chasing Trudeau

OTTAWA

Fourteen candidates want to lead the main opposition party

THE annual Manning Centre conference in Ottawa is popularly known as Woodstock for Canadian Conservatives. It is not obvious why. At this year's edition, held from February 23rd to 25th, booths manned by clean-cut millennials offered pamphlets on such subjects as child discipline and taxing carbon emissions. A few delegates sported "Make America Great Again" caps. Not a man bun was to be seen.

The main business of this year's gathering was to help decide which of 14 candidates should lead the Conservative Party, which lost an election in October 2015 after almost a decade in power and has been leaderless since. The choice, to be made on May 27th, will determine what sort of opposition the Liberal prime minister, Justin Trudeau, will face. It will set a new course for a party that has governed for 65 of the 150 years since Canada's creation.

For much of that time, it was hard to tell the two biggest parties apart. The Progressive Conservatives, as they were known from 1942 to 2003, endorsed the welfare state and the multicultural values espoused by the Liberals. That changed under Stephen Harper, who fused the Progressive Conservatives' "red Toryism" with the prairie populism of the former Reform Party. His merged Conservative Party championed smaller government, lower taxes and devolution of power from the centre to the provinces. Unusually among Western right-of-centre parties, Mr Harper's Conservatives strongly supported immigration. They won three elections from 2006 to 2011.

But Canadians eventually wearied of the cerebral Mr Harper and came to doubt that his small-government policies would halt the erosion of the middle class. Some

were turned off by his refusal to take climate change seriously and by the anti-Muslim bias that crept into the party's rhetoric. The Conservatives' core supporters are older, whiter and more rural than most Canadians. Conservatives now govern just three of the ten provinces and are in a "distinct minority" on municipal councils of big towns, points out Preston Manning, an elder statesman whose foundation hosts the conference. "The unvarnished truth is that we are currently in a trough," he says.

None of the candidates competing for the chance to pull the party out of it would abandon Mr Harper's legacy. In the Manning Centre debate, one of several in the long leadership contest, all proclaimed their aversion to Mr Trudeau's tax-and-spend Liberalism and their enthusiasm for developing Canada's natural resources and for free trade. The aspiring leaders are mostly still "colouring within the lines" sketched out over the past 25 years, says James Farney, editor of a book of essays called *Conservatism in Canada*. But each brings a different set of crayons.

A touch of orange

Maxime Bernier, a former foreign minister, would give the party a libertarian cast. He supports the most Woodstock-like initiative to appear at the conference: the Free My Booze campaign to end provincial monopolies over sales of alcohol. In keeping with that laissez-faire cause, Mr Bernier advocates ending protection for dairy, egg and poultry farms. Andrew Scheer, a former Speaker of the House of Commons, has conservative positions on social issues, such as abortion, but says he would not impose these on the party.

Also in this section

33 Searching for Peru's disappeared

33 Mexico City's backhander bus

34 Bello: How to pay for elections

Two contenders would, in different ways, bring a Trumpian tinge to the Conservatives. Kevin O'Leary, a star of reality television, shook up the race when he entered it in January. Brash and rich, Mr O'Leary revels in being a political outsider and brings a pizzazz that the other contenders lack. He has pushed the party to come up with ambitious plans to enliven the sluggish economy. Unlike Donald Trump, to whom he is often compared, Mr O'Leary enthusiastically backs the legalisation of cannabis, one of Mr Trudeau's pet projects. His rivals see him as a celebrity interloper (he joined the party last year). But he does not speak French, normally a fatal flaw in an aspiring prime minister.

Closer to Mr Trump in outlook is Kellie Leitch, a paediatric surgeon and former labour minister. She calls for screening immigrants, refugees and even tourists to make sure that they believe in "Canadian values". Most Conservatives do not seem attracted by such bare-knuckle politics. Frank Buckley, a Canadian-American who has written speeches for Mr Trump, told the conference that he sensed less anger in Canada than in the United States, perhaps because social mobility is still greater.

Just who will emerge from the scrum to become leader of the opposition is impossible to forecast. A recent poll of Conservative voters named Mr O'Leary, Mr Bernier, Dr Leitch and Lisa Raitt, a competent but unexciting ex-minister, as the most popular choices. But the decision will be made by the party's 85,000 members, who will list the candidates in their order of preference (voters for the least-popular candidates have their lower preferences counted, until one candidate wins a majority). A divisive contender like Dr Leitch may not have ►►

► broad enough support to prevail.

To win the next national election in 2019 the Conservatives will need an experienced centrist with broad appeal. That would argue for choosing someone like Michael Chong, the son of immigrants from China and the Netherlands, who was minister of intergovernmental affairs under Mr Harper. He is the only reddish Tory in the race. But he was booed for advocating a carbon tax, which is unpopular in Canada's energy-producing western provinces, the Conservative heartland.

Most of the 14 candidates who took to the stage in Ottawa would have little hope of winning the next election. The Woodstockers left with little sense of who might lead them and where. A booth outside the debate hall sold t-shirts with an image of Mr Trudeau and the legend, "Tell me when it's over." The wait may be long. ■

Peru's disappeared

Unearthing the past

LIMA

The government strives to investigate atrocities without reviving anger

THE threat posed to Peru's democracy by the Shining Path, a leftist guerrilla army, has ended, but memories of the war it waged against the state in the 1980s and 1990s are still raw. Nearly 70,000 people died or disappeared during the conflict. A truth and reconciliation commission issued a report in 2003, apportioning guilt roughly evenly between the government and the Maoist rebels. It did not foster understanding between the vast majority of Peruvians who despise the insurgents—who often behaved more like terrorists than guerrillas—and the few who are still drawn to it.

Recently Peruvians have been reminded of their differences. Last year a mausole-



What makes forgiving hard

um for members of the Shining Path who died in a prison uprising in 1986 opened in Lima, the capital. Politicians denounced it; the biggest party in congress introduced legislation in November to add symbols and monuments to the list of things that could be classified as an "apology for terrorism", a criminal act. On February 14th this year Peruvians marched to commemorate the 25th anniversary of the murder in Lima of María Elena Moyano, a leftist politician, by the Shining Path. "I remember and want others to understand," said Rosalina Meza, a marcher who witnessed Moyano's murder. Later in February, 12 Shining Path leaders, already jailed for terrorism and other crimes, went on trial for masterminding a car bombing in Lima in 1992 that killed 25 people and injured hundreds. The trial is expected to last for months.

The government of Pedro Pablo Kuczynski is eager to encourage forms of commemoration that heal wounds rather than reopen them. A law passed by congress last June, before Mr Kuczynski took office, established a department in the justice ministry to search for the remains of people who disappeared between 1980 and 2000. It is expected to begin its investigation this month. Just 1,600 bodies were found in earlier searches. Unlike those earlier efforts, the new investigations will not attempt to assign responsibility for what happened. Their main purpose will be to return victims' remains to their families. "This completely changes the dynamic," says Marisol Pérez Tello, the minister of justice and human rights, who sponsored the original legislation.

The search will start in the highland region of Ayacucho, where the Shining Path began its war and where, according to the truth commission, 40% of the deaths and disappearances occurred. The justice ministry thinks the region could hold 6,000 mass graves. But the mission may not avoid the rancour caused by earlier efforts to memorialise victims, Ms Pérez Tello acknowledges. Relatives whose remains are returned may demand justice. "Bad elements" in the army may be among the defendants if the discoveries lead to new trials, she says.

And the war has not quite ended. Remnants of the Shining Path continue to operate in a Belgium-sized area of rugged terrain, called VRAEM, which includes two provinces in Ayacucho. Their last big attack, in April 2016, killed eight soldiers and two civilians. The area remains under a state of emergency. The two brothers who lead the group, Víctor and Jorge Quispe Palomino, are on the United States' terrorist list. A poll by Ipsos late last year found that nearly a quarter of Peruvians think the Shining Path is reviving and attracting new members. As long as they think the menace is growing, it will be hard to bury grudges from the war. ■



Corruption in Mexico

The backhander bus

MEXICO CITY

Using tourism to educate people about a big problem

THE Estela de Luz ("stele of light") is not one of Mexico City's glories. The 104-metre (341-foot) tower, built from panels of quartz, was supposed to celebrate the bicentennial of Mexico's independence from Spain in 2010. But it was inaugurated in 2012, 16 months later than planned, and cost 1.3bn pesos (\$100m) to build, more than treble its original budget. The federal government paid the bill. Eight former officials involved in the tower's construction were arrested after its completion.

The delay and cost overruns earned the tower a place on the "Corruptour", a new twice-a-week bus tour that shows off the capital's monuments to graft, fraud and mismanagement. There are plenty of them. Tourists board a converted school bus, stripped of its roof and emblazoned with tabloid-style headlines, and visit ten sights, or nine when the traffic is bad. They include the Balderas metro station in the city's centre. A recorded commentary tells the saga of the metro system's Line 12. Its stations were so shoddily built that half of them had to close temporarily.

The bus pulls up at the institute of social security, Mexico's third-biggest public-sector purchaser of goods and services. The taped commentary explains that, according to a report in 2011, the institute was paying a third more than it should because its suppliers colluded with each other. (It has since improved its procurement practices.) The stop outside the interior ministry is an occasion to talk about impunity. The ministry is responsible for the maximum-security prison from which Joaquín "El Chapo" Guzmán, a drug kingpin, escaped in 2015, down a tunnel dug from the shower in his cell. That led to the arrest of 13 officials. Mr ►►

► Guzmán was eventually recaptured and extradited to the United States.

The Corruptour was dreamt up by a group of friends working for NGOs. “Everyone knows about corruption but imagines it is a monster,” says Patricia de Obeso, an organiser. “We’re trying to break it down and explain how it’s done.” The tourists, a mix of Mexicans and visitors from elsewhere in Latin America, do not buy tickets but are asked for donations.

The Corruptour is not the only gimmick for drawing attention to a problem that is indeed a monster (on average households spend 14% of their incomes to pay bribes

and meet other corrupt demands). The tour was inspired by a similar one in the north-eastern city of Monterrey. The *Mexican Corruptionary*, published last year, offers definitions of 300 corruption-related terms. A *góber* covers up for policemen in the pay of organised crime; a *hueso* (bone) is a bribe paid to get a public-sector job that itself offers bribe-taking opportunities. In 1996 the word “corruption” appeared in 27 Mexican headlines, according to Mexicans Against Corruption and Impunity, a think-tank. By 2015, with newspapers reporting on police who had taken part in the massacre of 43 students and on allegations that

the president’s wife had bought a house from a government contractor, the number of corruption-related headlines had jumped to 3,500.

Ms de Obeso encouraged the tourists to vent their own feelings about corruption. Luis, from the State of Mexico, which surrounds the capital, took the microphone to declare that Mexicans are “living in a time of crisis. People need to inform themselves.” But others on a sunny Sunday afternoon seemed to be more interested in snapping photos. They were not about to let their indignation get in the way of a good selfie. ■

Bello | He who pays democracy’s piper

Latin America’s growing debate on campaign finance

FOR months before elections, Latin Americans are bombarded by campaign publicity. In Brazil an obligatory nightly hour of political broadcasts sees a succession of attention-seeking pledges from presidential candidates and local hopefuls. In Peru walls and even mountain boulders are painted with the names of candidates. Although social media are increasingly important, many of the region’s politicians still line the streets with posters and hold rallies, plying supporters with food, t-shirts and even cash.

Who pays for all the paraphernalia of electoral democracy, and what might they get in return? Revelations of corrupt political donations in several Latin American countries by Odebrecht and other Brazilian construction firms are sparking demands to tighten the rules on campaign finance. Nadine Heredia, the wife of Peru’s former president, Ollanta Humala, denies having received a \$3m donation from Odebrecht for her husband’s victorious campaign in 2011. A former Colombian senator who admitted pocketing an Odebrecht bribe claims, without proof, that \$1m went to President Juan Manuel Santos’s campaign in 2014.

Popular wisdom holds that Latin American elections are an increasingly expensive free-for-all. (Despite the free television time, the cost of Brazil’s campaigns may be similar to that in the United States, by some estimates.)

In fact, the region’s governments have long sought to regulate campaign finance, but often ineffectually, as Kevin Casas-Zamora, a former vice-president of Costa Rica, and Daniel Zovatto, an Argentine political scientist, point out in a recent survey of the issue. Whatever the rules, the reality is that a small coterie of private businesses stumps up most of the campaign cash almost everywhere, except

perhaps in Uruguay and Costa Rica.

Uruguay was the first country in the world to give a public subsidy to political parties, in 1928. Now most Latin American democracies do so, but the subsidies are mostly small. In Venezuela, in theory, there are no subsidies; in practice the ruling party deploys unlimited state money and resources in its campaigns. All of Latin America except El Salvador bans foreign political donations. That did not stop Venezuela’s Hugo Chávez and Brazil’s Workers’ Party (via Odebrecht) from financing campaigns in other countries, to counter the centre-right bias of private donations.

Corporate donations have sometimes led to the private capture of slices of government. Take Chile, one of the region’s more advanced democracies, which has recently been shaken by several political-financing scandals. The most worrying involved revelations that several big fishing companies financed politicians who should have regulated them, but instead allowed them unrestricted rights to plunder Chile’s depleted seas in perpetuity.

Chile’s parliament has approved new rules drawn up by a committee headed by

Eduardo Engel, an economist. They restrict outdoor advertising, increase public subsidies, bar corporate donations and regulate those from individuals. Similarly, Brazil has banned corporate donations and shortened the duration of the official campaign. Several other countries are considering tighter rules. But in Chile some politicians blamed the record-low turnout (of 35%) in municipal elections last October on the lack of a “campaign atmosphere”. In Brazil’s municipal vote last year, the campaign curbs seemed to have helped more incumbent mayors than expected win re-election.

Campaign-finance reform is fraught with such trade-offs and unintended consequences. Public financing of politics is unpopular; in Mexico it may have raised, rather than cut, the cost of campaigns. Bans on corporate donations (which exist in several countries) risk prompting recourse to organised crime for money.

Nevertheless, the status quo has become untenable. It seems right to try to cut the cost of campaigns by shortening them. As for corporate money, some would argue for obligatory disclosure rather than a ban. Mr Engel says a role for corporate money might be acceptable in Chile in the future. Perhaps most important is that enforcing either transparency or bans requires capable and neutral electoral authorities. In Chile’s municipal campaign, the authority absurdly made it hard for individuals to display campaign posters in their homes.

In a region of great inequality of wealth, it is hard to disagree that corporate political donations should be tightly regulated. But campaign finance is a problem for which there are no panaceas, only hard choices and one incontrovertible truth: democratic politics costs money, and someone has to pay for it.





Also in this section

- 36 Paying for water in Africa
- 36 South Africa's traditional leaders
- 37 Rwanda's empty business district
- 37 The destruction of Mecca
- 38 Syria's unarmed rebel police

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Nigeria

A nation holds its breath

LAGOS

The president has been ill for six weeks, but Nigeria still needs governing

SITTING on the pavement outside the Lagos state government secretariat, Empero flicks through newspapers, looking for jobs. "We are smiling and we are dying," says the 36-year-old, a town planner by trade. Nigerians are known for their dramatic turn of phrase. But recent events may justify such rhetoric. The economy shrank by 1.5% in 2016. Inflation has more than doubled to 18.7% in 12 months. Meanwhile, the president, Muhammadu Buhari, has been out of the country since January 19th, receiving treatment for an undisclosed illness. There could hardly be a worse time for the 74-year-old former military dictator to be incapacitated. But much of the blame for Nigeria's current economic troubles can be laid at his door.

Mr Buhari was elected in March 2015 promising to defeat Boko Haram, the jihadist group terrorising the country's north-east, and to tackle endemic corruption. He had on his side a wave of hope; he was the first Nigerian opposition leader to oust an incumbent peacefully at the ballot box, despite his authoritarian past.

On national security he has made progress: Boko Haram, now splintered into two factions, no longer controls any big towns. But it is far from defeated, as the government has claimed repeatedly in the past couple of years. With many farmers still unable to return safely to their fields, hunger stalks the region: 450,000 children are severely malnourished. Elsewhere,

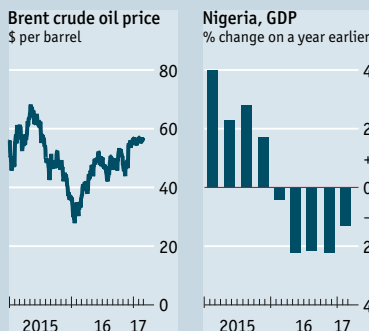
clashes between Muslim Fulani herdsmen and largely Christian farmers in southern Kaduna, in Nigeria's fractious Middle Belt, have killed at least 200 people since December. Oil production has not fully recovered after money-hungry militants attacked pipelines and rigs in the Niger Delta last year. When it comes to corruption, a number of bigwigs have been arrested and bags of seized money paraded before the media. Yet there have been no high-profile convictions yet. The state may be led by a former strongman, but it is still fundamentally weak.

It is the troubled economy, though, that looms largest now in Africa's most populous country. Mr Buhari was inaugurated

soon after the collapse of global oil prices. But instead of accepting reality (exports and government revenues are dominated by the black stuff), he reverted to policies he implemented when last in power in the 1980s, namely propping up the currency. This has led to shortages of foreign exchange, squeezing imports. The central bank released the naira from its peg of 197-199 to the dollar in June 2016, but panicked when it plunged, pinning it again at around 305. Exchange controls are still draconian. Consequently, many foreign investors have left, rather than wait interminably to repatriate profits. "The country is almost uninvestable," says one. Importers that can't get hold of dollars have been crippled. "To take a bad situation and make it worse clearly takes a bit of trying," says Manji Cheto, an analyst at Teneo Intelligence, part of an American consultancy.

By February 20th the naira had sunk to 520 on the black market. It has since recovered by around 13% after the central bank released dollars and allowed posh Nigerians to buy them cheaply to pay for school fees abroad. The reprieve is likely to be temporary, though. Most analysts agree that the naira should float freely. Egypt, which devalued the pound in November in return for a \$12bn IMF bail-out, is an oft-cited example. After falling sharply it found a floor before rebounding as the best performing currency in the world this year. However, Nigerian officials worry that the inevitable inflationary spike could lead to unrest, particularly if they are forced to raise subsidised petrol prices. It is also anathema to Mr Buhari, who is thought to blame an IMF-advised devaluation for the coup that ejected him from power in 1985. "They all know what needs to happen," says a Western official of the nominally independent central bank's leadership. "But somehow they don't dare to [do it]." ▶▶

Sticky stuff



Sources: Thomson Reuters; Haver Analytics; government statistics

▶ The IMF predicts Nigeria's economy will expand by 0.8% this year. That would lag far behind population growth of around 2.6%. But the government will tout any recovery as a victory. "That's the real danger, that they will take that as validation their policies are working," says Nonso Obikili, an economist. Meanwhile, Nigeria continues to take out expensive domestic and foreign loans. While debt remains relatively low as a proportion of GDP, at around 15%, servicing it is eating up a third of government revenues. After a \$1bn Eurobond issue was almost eight

times oversubscribed last month, it plans to issue another \$500m one this year. Officials have also said that they want to borrow at least \$1bn from the World Bank. That remains contingent on reform.

If Mr Buhari remains in London much longer, his absence could provide a window for Nigeria's technocratic vice-president Yemi Osinbajo to push through a proper devaluation. Mr Osinbajo, currently in charge, has proved an energetic antidote to his ponderous boss, visiting the Delta for peace talks and announcing measures intended to boost Nigeria's position

in the World Bank's Ease of Doing Business rankings, in which it currently ranks a lowly 169 out of 190.

Mr Buhari called the governor of Kano during a prayer meeting on February 23rd to say he was feeling better, the first time Nigerians had heard from their president since he left the country. But the state of his health is still unclear (aides have said only that he needs more rest). Mr Osinbajo's appointment as acting president has followed constitutional protocol. In 2010, by contrast, it took three months for Goodluck Jonathan, a southerner, to be cleared to rule while Umaru Musa Yar'Adua, the northern president, lay dying in Saudi Arabia. There are ghosts of that power struggle in rumours that Mr Buhari's closest allies are manoeuvring to try to keep the presidency with a northerner should their boss die or be forced by ill health to step down. That could split the ruling All Progressives Congress into three or four factions, destabilising policy-making. Nigeria's best chance of reform in the short run, then, is probably for the president to rest up in London a while longer. ■

Water in Africa

Pay as you drink

KERR LIEN

An innovative cure for broken pumps

IN THE mid-2000s Playpumps International, a charity, hit on a photogenic way of providing clean water to African villages: a pump powered by children playing on a merry-go-round. Donors and celebrities pledged more than \$16m. But the system was costlier than alternatives, and needed so much "playing" that it started to look like thinly disguised child labour. It became a byword for wasteful Western aid—but far from the only example.

At any time around a third of the water infrastructure in rural sub-Saharan Africa, from hand pumps to solar-powered systems, is broken. Even after spending billions of dollars, most donors still cannot ensure the pumps they pay for are maintained (just 5% of rural Africans have access to piped water). Many of the village committees responsible for collecting the fees that should cover repairs are corrupt.

More often, though, villagers simply struggle to gather money, find a mechanic and obtain spare parts, says Johanna Koehler of Oxford University. Kerr Lien, a village in central Gambia, reverted to using a manual well for nine years after the inhabitants were unable to fix a fault in their solar-powered pump. There are "lots of white elephants everywhere", says Alison Wedgwood, a founder of eWATER, a British startup that aims to solve many of these problems. Its solar-powered taps, 110 of which have been installed in Kerr Lien and six other Gambian villages, dispense water in response to electronic tags. The tags are topped up by shopkeepers using smartphones; 20 litres of water cost 0.50 dalasi (1 cent), and 85% of the payment is set aside to cover future repairs. The taps are connected to the mobile network, so they can transmit usage data to alert mechanics to problems. eWATER hopes to have 500 taps

serving 50,000 people in Gambia and Tanzania by the end of 2017.

Since they are paying for it, the women and girls who collect the water also take more care now not to spill any, leaving fewer puddles in which mosquitos can breed. Most important, though, is to fix broken pumps quickly. In Kenya Ms Koehler found villagers were prepared to pay five times as much for water so long as their pumps were fixed within three days, compared with the previous average of 27.

Startups like these could transform rural water provision in Africa, just as they are doing with solar-powered electricity. Twelve-year-old Isatou Jallow will still wash her family's clothes with well water every week. But there will soon be a drinking tap just outside her house. That means more time studying, instead of spending afternoons laboriously fetching water from far away. It also means loftier ambitions. "I want to be a government minister," she says.



South Africa

Hail to the chiefs

UPINGTON

Jacob Zuma wants to strengthen the role of traditional leaders

IN A community hall at the edge of the Kalahari desert, hundreds of Khoisan (also known as Bushmen) have gathered for a hearing on a new bill that could decide who rules them. Several are dressed in animal skins, with quivers of arrows slung across their backs. But despite their obvious interest, they are struggling to learn the details of the Traditional and Khoisan Leadership Bill. Few have seen a copy. It is available only online, and in English.

Even expressing their views is a problem: the parliamentary committee that travelled to the remote Northern Cape province for public hearings late last year arranged no translators for Khoi or San languages, or even for Afrikaans, the local lingua franca. Constance Mogale, the national co-ordinator for the Alliance for Rural Democracy, an activist group, watched the public hearing in Upington and shook her head in dismay. "They're already trampling on our right to information," she said.

Critics say the bill re-entrenches the tribal boundaries and leadership structures created by the apartheid regime, which dumped many black people in "Bantustans", semi-autonomous homelands created to maintain the fiction that blacks did not need the vote because they were ▶▶



A stickler for tradition

► governed by a tribal chief, even if they barely knew him. The 17m people now in these areas would have no choice but to live under a traditional authority, which would have powers over land use and could be appointed by the government.

There is no shortage of examples of chiefs putting their own interests before those of their people. South Africa's anti-corruption ombudsman recently found that in one place, Bapo ba Mogale, in the platinum belt north-west of Johannesburg, at least 600m rand (\$45m) has gone missing from mining revenues meant for the community. In Limpopo province, a traditional council has been criticised for letting communal land be used by a mining firm that had given payments to the council. The new bill would give even more power to traditional leaders to make deals on behalf of their people.

For the Khoisan, the earliest surviving inhabitants of South Africa, the bill presents a different set of issues. Pushed off their land by colonists and oppressed under apartheid, their post-1994 appeals for land rights and cultural protection have largely been ignored by the ruling African National Congress. Although the new bill purports to address Khoisan gripes, it ignores the thorny issue of land (one group of Khoisan, in a recently filed court case, claims ownership of the whole of South Africa). And though traditional leaders in the former Bantustans would gain power over land, Khoisan leaders (who currently have no official recognition) would gain jurisdiction only over people. Joseph van Wyk, an organiser with Indigenous First Nation Advocacy South Africa, a non-profit, told the public hearing in Upington that his group objects to the bill because it fails to recognise the Khoisan as the first people of South Africa. But for Jacob Zuma, the president (pictured), the bill is a handy way to empower the rural bigwigs whose electoral support he craves. ■

Rwanda

If you build it, they may not come

KIGALI

Empty buildings prompt draconian action

BEETHOVEN'S "Für Elise" floats through the lift of Makuza Peace Plaza, a shiny new office block, as it climbs to the 12th floor. Opened with fanfare by Paul Kagame, Rwanda's president, in 2015, Makuza is one of several new high-rises in the central business district of the capital, Kigali. But the music has an eerie quality as you rise to the building's summit. This is because, from the seventh floor up, Makuza is empty.

For a city pitching itself as east Africa's business hub, under-occupied skyscrapers look bad. So at the start of the year the government took action. Letters were sent to thousands of businesses ordering them to hew to the city's master plan and move to designated commercial buildings by March 31st. Confusion and panic ensued, as startups and even NGOs scrambled for space in the limited number of reasonably priced buildings available. In the area around Makuza, office space costs on average nearly \$20 a month per square metre, as much as four times what it would be outside. "It's been a nightmare," says one exasperated foreign businesswoman, who fears she may have to move to Kampala, in neighbouring Uganda.

Rents in the city centre are prohibitively expensive for many because land in Rwanda is pricey, as are building materials and bank loans. But lack of supply is not the problem. Enticed by juicy tax incentives, investors have been funneling vast amounts of capital into high-end buildings, anticipating hefty profits. Vacant floors are a headache. They are especially painful for the ruling Rwandan Patriotic Front (RPF), which is heavily involved in property through its business ventures (see page 54). Some suspect that by issuing the directive, the RPF is protecting its own investments.

City authorities suggest they will be lenient towards those who have recently signed new leases, and hint that some NGOs will be exempt. But few doubt that the government means what it says. The master plan, which carves up the city into zones defined by the type of activity allowed in each, has acquired almost biblical status since its adoption in 2013. Unusually for an African city, land use and construction rules are vigorously enforced. "This is Rwanda," smiles an estate agent in his office overlooking Makuza. "They will have to comply. There is no choice."

Saudi Arabia

The destruction of Mecca

ABHA

The clumsy reconstruction of Mecca has effaced 1,400 years of Islam

AS THE governor of Mecca, Prince Khalid bin Faisal Al Saud has been able to compensate for earlier failings. He came to his role in 2007 from Asir province, where his plans to erect modern tower blocks in the city of Abha were largely unfulfilled. He successfully erased Abha's quaint old town, with its beehive houses made of wattle, only to replace them with squat breeze-block bungalows. Not a high-rise was to be seen.

Now, on top of what was Mecca's old city of lattice balconies and *riwaq* arches, the prince has overseen the Middle East's largest development project. Skyscrapers soar above Islam's holiest place, dwarfing the granite Kaaba far below. Diggers flatten hills that were once dotted with the homes of the Prophet's wives, companions and first caliphs. Motorways radiate out from

the vast new shrine. Local magnates are as keen to build as the government. Jabal Omar Development, a consortium of old Meccan families, is investing hundreds of millions of dollars to erect two 50-floor towers on the site of the third caliph's house. Such is the pace that for a time the holy city's logo was a bulldozer.

Demolition, say officials, is the inevitable price of expansion. In 1950, before it all began, 50,000 pilgrims perambulated round the Kaaba, the heart of the *hajj* ritual. Last year, 7.5m did so. Within three years, the authorities are planning to double that huge number. "There's no other solution," says Anas Serafi, an architect and member of the board of Jabal Omar Development. "How else could we absorb millions of pilgrims?" Casualties are a regrettable by-product: in September 2015, the world's largest mobile crane toppled on the Grand Mosque, killing 107 pilgrims. But two weeks later more than 2,000 pilgrims were killed in a stampede, highlighting the dangers of a lack of space.

As Mecca's custodian, King Salman bin Abdul Aziz sees both his prestige and his pocket benefit from the increasing traffic. Under the government's transformation plan, revenue from pilgrimages will grow ►►



Goodbye to all that

► to compete with those from oil. Billions are being spent on railways, parking for 18,000 buses to transport pilgrims and hotels for them to stay in, heavy with gilded chandeliers. The McDonald's golden arches gleam outside the gates of the Grand Mosque.

So thorough is the erasure that some suspect the Saudi royals are determined to finish a task begun in the 18th century, when from Arabia's unruly hinterland the Al Saud and allied Bedouin tribes rose up against the Ottomans. Declaring a *jihad*, they pitted their puritanical strain of Islam, eponymously known as Wahhabism, first against the Empire's multi-religious rule and then, after its collapse in the first world war, against the peninsula's other Islamic rites. As part of the campaign of territorial and spiritual unification, called *tawhid*, they conquered Mecca in 1924.

Critics call this Islamic Maoism. Out went the city's heterogeneous mix of Maliki, Shafii and Zaydi rites; in came homogenisation under the Wahhabi creed. Alongside the black and white dress they forced on women and men respectively, the new tribal rulers reshaped the urban environment, stripping away the past. They replaced the four pulpits at the foot of the Kaaba, one for each of Sunni Islam's schools, with a single one, exclusively for Wahhabi preachers. They cleansed the faith of saint-worship, demolishing shrines venerated by Shia and traditional Sunnis alike. Of the city's scores of holy sites, only the Kaaba survives.

Now that so much is gone, some Mecans are having second thoughts. "We've turned our past dating back to Abrahamic times into a petrol station," grumbles a local. Mr Serafi, the developer, is designing a virtual heritage trail. Maps trace routes through the non-existent old town, highlighting the homes of the first caliphs. His brother has used the profits to create Jed-

dah's finest art gallery nearby.

Might the government, under the deputy Crown Prince Muhammad bin Salman, support an element of restoration? The transformation plan he unveiled last year highlights the kingdom's tourism potential, and promises billions for heritage projects. In a recent interview, his information minister, Adel Al Toraifi, lambasted "radicals and terrorists" bent on cultural demolition. "Beautiful people and regions filled with culture, music, dances and tradition were all destroyed by political Islam," he said. Replacing the Kaaba's lost pulpits might be a good place to start. ■

Syria

Truncheons at a gunfight

GAZIANTEP

The problems of policing rebel-held areas without weapons

WHEN his superiors ordered him to open fire on civilian protesters, back in 2011, Adeeb al-Shallaf, a local police chief, refused. Then, worried that the Syrian regime would kill him for disobeying orders, he smuggled his family out of the north-eastern province of Raqqah and crossed the border into Turkey.

From there, General Shallaf watched as Syria's peaceful protests gave way to armed revolt. Inevitably crime rose in areas under rebel control, since the state's institutions were gone. Fellow defectors asked General Shallaf to go back and help create a new police force that would bring order. "The beginning was difficult for us," says General Shallaf, who spent 30 years in the Syrian police. "How can you launch a

police force when there's no state, there's a war and you have extremists operating?"

What began as a small, ragtag force of a few hundred men now employs 3,300 officers across three provinces. Money from Western governments has paid for this expansion, making the Free Syrian Police (FSP) one of the largest recipients of non-lethal aid to the Syrian opposition.

The West's reluctance to send arms to rebel-held parts of Syria means the FSP is, for the most part, forced to operate without weapons in a country awash with guns and armed groups. Turkey's tight control of its official border crossings makes it hard to supply the police with even basic equipment, like truncheons and handcuffs.

At first, General Shallaf bemoaned the West's refusal to send weapons. He remembers how his officers once failed to stop a robbery at a factory because the thieves came armed with anti-aircraft guns. But he has since come round to the idea of a largely unarmed police force. "Everybody has a gun, so if we carried weapons we'd be seen as just another armed faction," he says.

Instead, his men focus on community policing. They control traffic, patrol the streets at night, build bomb shelters and ensure that children stay away from sniper corridors. They mend streetlights and cordon off unexploded bombs. The idea is to improve relations with residents, who have grown up in a country where a policeman is more likely to extort than protect. "We want to change the image of the police as a corrupt, violent force that tortures people," says the general, who now commands the FSP in Aleppo province.

Big challenges remain. The judicial system in much of rebel-held Syria is sham-bolic. Most armed groups run their own courts, ruled over by religious scholars with dubious credentials who hand down judgments based on conflicting interpretations of *sharia* (Islamic law). "The donors are worried about *sharia*, so they stay away from the justice sector," says Sandra Bitar, a Syrian activist. "They pay for a police force, but if there are no professional courts then how can the police do their job properly?"

Some see in the FSP the foundations of a future Syrian police force. This may be wishful thinking. As the regime claws back territory from the rebels, governments in the West are debating whether to scale back support for the opposition. A new alliance between Jabhat Fateh al-Sham, a jihadist group associated with al-Qaeda, and a handful of more moderate rebel factions has swung the argument in favour of those who want to reduce aid. Western governments have suspended funding to the FSP in parts of the north where the jihadists' new allies hold sway. Yet that risks perpetuating a power vacuum. In such chaos, jihadism can thrive. ■



Also in this section

40 Eine deutsche Atombombe?

40 Russian riddles

41 Populism and social media

42 Charlemagne: Europe's inescapable Court of Justice

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Populism in Italy

A tale of two mayors

ROME AND TURIN

Is the Five Star Movement ready to govern? Maybe, maybe not

IT IS the best and worst of times for the Five Star Movement (M5S), the populist group that is Italy's main opposition. On the bright side, Matteo Renzi, the former prime minister, resigned on February 19th as leader of the Democratic Party (PD), the dominant party in government and the M5S's chief rival. Mr Renzi will probably regain control of the PD, but his move highlighted a split between his supporters and critics, some of whom defected on February 28th to a new radical-left parliamentary group. Small wonder the M5S and PD are nearly even in the polls.

But if the M5S's popularity is clear, its competence is not. The party's most senior governing officials are two mayors elected last June, Virginia Raggi in Rome (pictured at left), Italy's biggest city, and Chiara Appendino in Turin (pictured at right), its fourth-biggest. Their performances since could scarcely be more dissimilar.

On February 7th Ms Raggi learned that prosecutors had formally placed her under investigation for a second time. The mayor, who denies wrongdoing, risks indictment for falsifying a document and abuse of her office. Her counterpart in Turin, according to a survey published in January by *Il Sole-24 Ore*, a financial daily, has become Italy's most popular big-city mayor. Ms Appendino's approval rate among the citizens of Turin was 62%, an increase of seven percentage points since her election.

The two women are among the more reassuring faces of a movement that is led by a demagogic erstwhile comedian, Beppe Grillo. Ms Raggi is a lawyer; Ms Appendino a businesswoman. The disparities in their records in office are partly caused by differences between the cities they govern. Turin, in the shadow of the Alps, is elegant but unshowy, imbued with a culture of reserve and compromise. It is said to have more Ferraris per head than any other Italian city, but one never sees them. The bureaucracy bequeathed to Ms Appendino by the previous mayor, a member of the PD, has a progressive outlook and a reputation for efficiency.

Rome, on the other hand, for all its ravishing beauty, is corrupt, chaotic and cynical. Ms Raggi inherited a city hall notorious

for sleaze that had been under central-government administration because of an investigation into links between local-authority executives and organised crime. Several officials were behind bars.

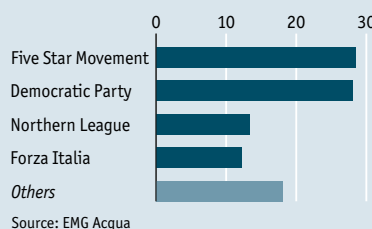
Unsurprisingly, Ms Raggi's biggest problems have involved personnel. The mayor put her trust in officials who are now in jail or under investigation. The latest twist concerns a city hall functionary whom Ms Raggi promoted, almost tripling his salary. He was found to have taken out three life-insurance policies worth €41,000 (\$43,150), and to have made the future mayor their beneficiary. Why remains unclear. Ms Raggi says she knew nothing of the transactions and could only have profited if the policyholder had died. Prosecutors, who were already investigating the mayor over another appointment, appeared to take her word. But they have since opened a second investigation into alleged irregularities in the policyholder's promotion. Ms Raggi is a suspect.

Ms Appendino chose her departmental chiefs before her election. She sidelined her most dangerous rival within the local M5S and works in apparent harmony with a right-hand man inherited from the previous administration. Maurizio Molinari, editor of *La Stampa*, a Turin-based daily, offers two reasons for her popularity. "She keeps her distance from the M5S," he says. "People don't feel they're being governed by [Mr Grillo's followers], but by Ms Appendino." And, he adds, the mayor is "very Torinese: low-profile".

Her achievements, however, have also been modest. And apart from some symbolically radical gestures (including a proposal for vegan school lunches), what she has done has cost her support among M5S activists and working-class voters, who backed her because they felt the PD had

Neck and neck

Italy, % polled, 26th February 2017
"If an election were to be held now, how would you vote?"



grown too close to the city's elite. The mayor has sidestepped her movement's commitment to blocking a high-speed rail link through the Alps, explaining that she is powerless to stop it. And she has balked at taking the management of the local water consortium out of private hands.

This is almost treasonable for the M5s. Public ownership of water is one of the five "star" issues that give the movement its name. "The M5s has always been on our side," complains Mariangela Rosolen, a veteran campaigner for de-privatising the local water consortium. Ms Rosolen says activists are considering a demonstration against Ms Appendino. That could mark a turning point in her fortunes. But for her admirers, it would be evidence of her ability to stick shrewdly to a middle path that might one day lead her to national office.

Her party's chances of giving her that opportunity look ever better. Since Mr Renzi's government fell in December, the right has failed to unite, while the left has squabbled ruinously. Matteo Salvini, leader of the nationalist Northern League, has wrenched his party rightwards, turning it into an Italian reflection of Marine Le Pen's National Front. That makes it harder to ally with Silvio Berlusconi's centre-right Forza Italia party. Meanwhile, the mutiny in the PD may leave it unable to win a general election. Mr Renzi complained that the mutineers were "giving Mr Grillo a nice present". That is hard to dispute. ■

German defence

Eine deutsche Atombombe?

BERLIN

Donald Trump has Germans thinking the unthinkable

IT BEGAN in November, soon after the election of Donald Trump as America's president. The publisher of the *Frankfurter Allgemeine Zeitung*, a conservative newspaper, opined in an editorial that it was time to contemplate "the altogether unthinkable for a German brain, the question of a nuclear deterrence capability, which could make up for doubts about American guarantees". Roderich Kiesewetter, a foreign-policy expert in the Christian Democratic Union, the party of Chancellor Angela Merkel, chimed in that there should be no "thought taboos". He and other politicians then went silent, apparently after a signal that the chancellor did not need this distraction in an election year. But in Germany's think-tanks the debate kept raging.

Since 1945 West Germany and then the reunited country have relied on the American nuclear shield to deter aggression from Russia. A prominent thesis, outlined in



Germans' traditional view on nukes: no thanks

1984 by Josef Joffe, a journalist, holds that European integration was only possible because this external American power had "pacified" the age-old Franco-German conflicts. So West Germany, on its best behaviour after the war, signed the non-proliferation treaty in the 1960s; it reaffirmed the pledge in the treaty that led to reunification in 1990.

Suddenly, however, there is an American president who, though he said last week that he would "strongly support NATO", has also called the alliance "obsolete" and suggested that his support might be conditional on allies meeting their commitments to spend more on defence. By the ghastly logic of mutual assured destruction (MAD), deterrence must be unconditional to be credible. Countries in eastern and central Europe are beginning to fret about their vulnerability to nuclear blackmail by Russia under Vladimir Putin.

Germany's most obvious response would be to approach France and Britain, NATO's other two nuclear powers, for a shared deterrent. But their arsenals are small. France, moreover, has so far been unwilling to cede any sovereignty over its nuclear arms and has always been sceptical about shared deterrence. Britain, as its prime minister, Theresa May, has already hinted, might make its nuclear shield a subject of negotiation during the upcoming Brexit talks.

To Maximilian Terhalle, a German professor currently teaching in Britain, this means that Germany, Poland or the Baltic countries could never fully rely on France or Britain retaliating against Russia for a strike against them. He concludes that Germany must think about getting its own nukes, perhaps in collaboration with neighbours. Even the leader of Poland's governing party, Jaroslaw Kaczynski, a habitual Germanophobe, called in February for a European nuclear deterrent, presumably

financed largely by Germany.

The different dangers posed by Mr Putin and Mr Trump have raised the question of "how to deter whom with what", even though German nukes are not the best answer, says Karl-Heinz Kamp of the Federal Academy for Security Policy, a government think-tank. Mr Terhalle, for his part, thinks that even a debate about a German nuclear weapon could help—if it convinced Mr Trump to stop undermining the existing international order. ■

Russian riddles

Whispers from the Kremlin

MOSCOW

Telegram, a messaging app, is Russia's juiciest news source

OVER the past year, a group of political bloggers purporting to have access to inside information have offered insight into the workings of the Russian state. They can be found on the messaging app Telegram, which has a "channels" feature that allows readers to subscribe to a feed but not to respond. The bloggers, often anonymous, serve up news spliced with cutting commentary and the whisperings of the Russian elite. The most popular, with some 26,000 subscribers, is Nezygar, or "Not Zygar"—a reference to Mikhail Zygar, a former editor-in-chief of the independent television network Dozhd ("Rain"). (Some think Nezygar is a Kremlin project.) Messages arrive on users' smartphones alongside conversations with friends, creating a sensation akin to having a Kremlin insider on speed dial.

The channels' popularity says less about the quality of their information than

▶ it does about the lack of other sources. “If Russia had lots of worthwhile political analysts, lively political journalism and strong independent media, there would be no ‘Nezygar’ phenomenon,” writes Oleg Kashin, a columnist. “But when there’s dirty, rusty water coming from the faucet, sometimes you want to drink from the river, and not even guess at whether sewage flows into that river or not.”

Nezygar came to prominence in the spring of 2016 with a string of detailed posts dissecting the decision to create a new national guard. The decision was “the apogee of the conflict among the *siloviki* around VVP [Vladimir Vladimirovich Putin],” began one typical dispatch, referring to the ex-spies and securocrats who dominate the administration. Posts since have discussed the arrest of economy minister Alexey Ulyukaev and elite gossip about the security services and the Orthodox church. Other Telegram channels, including the anonymous collective *Metodichka* and *DavydovIndex* (written by political consultant Leonid Davydov), have followed suit. The lack of clear sources is not a problem. “Paradoxically, the anonymity inspires more trust,” argues Ekaterina Schulmann, a political scientist. “There’s a demand for secrets.”

Guessing Nezygar’s identity has become a parlour game in Moscow political circles. Some believe the author—or authors—are journalists or political analysts; others suspect a government or security official. Earlier this year, Russia-24, a state-run television network, aired an interview with a man in a black balaclava who claimed to stand behind the feed. Shortly thereafter, a rebuttal appeared on Nezygar’s channel: “The interview that wasn’t.”

Beyond anonymity, the Telegram platform offers authors some protection from Russia’s increasingly rigid internet censorship. The app is the brainchild of Pavel Durov, the exiled creator of Russia’s VKontakte social network, and claims to protect user data from governments. (It became a favoured platform for Islamic State jihadists until Mr Durov kicked them off.) As a messaging service rather than a website, Telegram falls outside Russian regulations on media and blogging. When Mr Davydov sought to publish exit polls during parliamentary elections last year, his lawyers recommended opening a Telegram channel. “It’s a lacuna in the law,” he says.

That may not last much longer. Roskomnadzor, Russia’s communications watchdog, reportedly called in several Telegram bloggers for a meeting last month. “It’s clear that the government has begun paying attention,” says Andrei Soldatov, co-author of “The Red Web”, a history of the Russian internet. Legislation to bring the messenger under tighter control is also said to be in the works. The river of gossip may soon run dry. ■

Populism and social media

Twitter harvest

Europeans are less eager consumers of online ranting than Americans

HEINZ-CHRISTIAN STRACHE, the leader of Austria’s nationalist Freedom Party, fancies himself a rapper. For the past decade he has been recording amateurish music videos of rap songs like *Österreich Zuerst* (“Austria First”), which features the lyrics “For anyone who doesn’t want to integrate/ I have a destination/ go back home, have a good flight!” (It sounds no better in German.) No mainstream TV channel would show such videos, but when Mr Strache posts them on Facebook, the media report on them.

Europe’s populists were early adopters of social media. In the Netherlands, Geert Wilders pioneered the use of outrageous tweets that infuriate his opponents and fire up his followers. (Unlike Donald Trump’s, they are sparse and calculated, not nocturnal and impulsive.) In France, Marine Le Pen’s National Front co-ordinates hashtags, memes and animated videos across social-media platforms. In Germany, the demonstrations of the anti-Muslim *PEGIDA* movement began with the creation of a Facebook group. The far-right Alternative for Germany has more likes on Facebook than any other German party—over twice as many as the Christian Democrats of Angela Merkel, despite having less than half as much support in polls.

Italy’s left-wing Five Star Movement, led by Beppe Grillo, a comedian, is Europe’s most digitally native political party. Its co-founder, Gianroberto Casaleggio, an IT executive who died last year, believed that web-based voting could resurrect the direct democracy of ancient Athens. On Mr Grillo’s blog, one of the most popular in Italy, members debate, vote and even purge other members. Such integration of party politics with social media goes further than anything attempted in America.

But in other ways Europe is less suited

to internet-based populism than America. Enthusiasm for social media is related to scepticism towards traditional media, says Cornelius Puschmann of the Alexander von Humboldt Institute, a Berlin-based think-tank—and Americans have plenty of both. In 2016, 16% of American internet users accessed Twitter at least once a month, according to comScore, a research firm. That year, Americans’ trust in news fell to just 33%, according to the Reuters Institute, a research centre at Oxford University.

Europeans, by contrast, have more confidence in traditional media and are less active on social media. Nearly 13% of Dutch internet users log on to Twitter once a month, but only 6% of Italians, 5% of French and 4% of Germans do. Facebook use is more common, but still lower than in America. Meanwhile, 54% of Dutch and 52% of Germans trust the news, according to the Reuters study. For German public radio and TV, the figure is over 70%, according to a survey by WDR, a public broadcaster based in Cologne. Just 8% trust what they see on Facebook and Twitter.

In Italy trust in news has declined to 42%, and in France to 32%. Yet Julia Cagé, a French media expert, does not think France is being overtaken by a wave of post-truthism. Publications like *Libération* and *Le Monde* have launched fact-checking tools to counter rising fears of “fake news”.

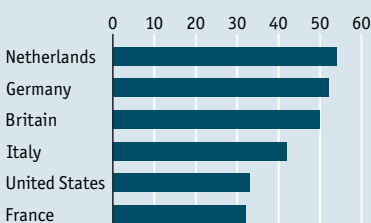
Who needs the aggregation

European privacy laws may constrain some of the social-media techniques used in America. Cambridge Analytica, a firm employed by Mr Trump’s campaign, used voter data aggregated from many sources to woo his supporters and discourage Hillary Clinton’s. Stephen Bannon, Mr Trump’s chief strategist, gives this database much of the credit for his victory. Other analysts question its effectiveness. In any case, European laws prohibit using data on individuals’ race, health, religion or political beliefs without their consent, which would make such aggregation difficult.

Populists are most influential when mainstream media pay attention to them, as with Mr Trump’s tweets, says Cas Mudde, a political scientist at the University of Georgia. Europe’s media may be somewhat less vulnerable to this temptation. But social-media platforms also offer a space where zealots can reinforce each others’ views, says Brendan Nyhan, a political scientist. And they make it possible to create fake accounts that amplify a candidate’s support. BuzzFeed, a news website, has reported on chat rooms where backers of Ms Le Pen help American supporters of Mr Trump to post comments on French news sites. Users are advised to create fake accounts with attributes that are not stereotypically pro-National Front, such as gay, Jewish, or “cute girl”. On the internet, no one can tell you’re American. ■

Not post-truth yet

“You can trust most news most of the time”
% polled in agreement, 2016



Source: Reuters Institute for the Study of Journalism

Charlemagne | Contempt of court

Britain may find it hard to escape the European Court of Justice



THE European Court of Justice (ECJ), a stately place populated by robed judges, eager clerks and artworks depicting clunky legal metaphors, seems an unlikely place for a coup. But it is here, “tucked away in the fairyland Duchy of Luxembourg”, wrote Eric Stein, an American academic, that the court “fashioned a constitutional framework for a federal-type structure in Europe”. This line has resonated with the many critics that the court, the supreme judicial authority in the European Union, has attracted. British Eurosceptics in particular have seen in the ECJ a political project shrouded in legal obscurantism that poses a deep threat to the ancient sovereignty of their courts and MPs.

Now that Britain has voted to leave the EU, liberation from the shackles of Luxembourg ranks second only to control of immigration in the Brexiteers’ hierarchy of needs. That explains why Theresa May, the prime minister who will shape the terms of Britain’s departure, has vowed to take the country out of the ECJ’s jurisdiction. “We will not have truly left the European Union,” she said recently, “if we are not in control of our own laws.”

In one respect, this is trivial. The ECJ is the court of the EU; quitting the club means leaving the court’s purview. But examine another of Mrs May’s stated aims—to retain the “greatest possible access” to the EU’s single market after leaving it—and her principles begin to look more like a predicament.

To understand why, consider what the court actually does. Its critics have often focused on a string of rulings in the 1990s that elucidated and expanded the rights of Europeans to live and work across the EU. (More recently, the court has restricted EU migrants’ rights to benefits.) They have watched with concern as EU treaties have expanded the court’s responsibilities. Since 2009 the Charter of Fundamental Rights has been invoked in a series of data-privacy cases, including the “right to be forgotten” ruling, under which individuals can force search engines to remove links to embarrassing or defamatory websites. The coming weeks may see big decisions on humanitarian visas, religious headwear at work, and EU sanctions on Russian oil firms.

Less well known is the regular churn of ECJ rulings that keep the EU’s single market chugging along, including the right to trade as freely across borders as within them. The 1963 *Van Gend en Loos* case, beloved by EU law students, involved a Dutch haulage

firm hit with duties on imports from West Germany. Later came a crucial ruling obliging West Germany to let a French blackcurrant liqueur be marketed as such. Such prosaic cases hardly resonate with citizens the way Supreme Court rulings like *Roe v Wade* do in the United States. But they helped build the single market, still the EU’s singular achievement, as much as any law or treaty.

This market is so important that the court’s rulings extend deeply even into non-EU countries that seek close access to it. “The influence of our case law on third partners is very, very big,” says Koen Lenaerts, the president of the ECJ. Norway, Iceland and Liechtenstein, the three non-EU members of the European Economic Area, are governed by rulings of the EFTA court, which closely follows the ECJ. Swiss law is nominally independent, but in practice courts tend to track Luxembourg because Switzerland is so deeply integrated into EU markets. Voters periodically grumble about the influence of “foreign judges”. But no Swiss government has seen fit to do anything about them.

What does all this mean for Britain? It depends on the trade deal Mrs May secures with the EU, but anything short of autarky means the country will never be entirely free from the court’s clutches. At a minimum, any British firm trading with the EU will need to understand relevant ECJ rulings. Companies doing business in the single market must abide by EU competition rules, as American giants like Microsoft and Google have learned. The ECJ will probably supervise any post-Brexit transitional arrangements. And it can be called on to scrutinise any trade deal signed by the EU. Mr Lenaerts has said there are “many different ways” in which his court might be asked to confront Brexit.

But Mrs May’s “greatest possible access” implies something more. The closer the trading relationship, the more need for harmonised or mutually recognised regulations and a body to oversee it all. The ECJ supervises the European Common Aviation Area, for example, which opens European skies to all-comers. Someone will have to monitor the legal “equivalence” that would allow British financial-services firms to trade inside the single market. And although Mrs May’s misnamed “Great Repeal Bill” will incorporate the entire *acquis* into British law after Brexit to ensure legal continuity, “EU law is premised on the EU system of remedies,” notes Catherine Barnard, a law professor at Cambridge University. Luxembourg may not be so easy to shake off.

Booing the referee

Mrs May’s government accepts the need for some sort of dispute-resolution mechanism. But the relevant section in its White Paper, the best guide there is to British priorities, “lacks any real content,” says Ms Barnard. No option looks ideal. Joining the EFTA court, as its president has urged, would break the spirit of Mrs May’s pledge to quit ECJ jurisdiction. The EU is sick of the complexity of the Swiss deal and will hesitate to do anything similar in its legal arrangements with third parties. And any attempt to create a new sort of judicial tribunal risks incurring the wrath of the ECJ itself. The court has been known to strike down attempts by EU governments to set up alternative centres of legal power.

By the end of March, Mrs May will trigger Article 50 of the EU treaty, kicking off two years of Brexit negotiations. As the talks proceed, the crystalline certainties of the Brexit campaign will give way to difficult trade-offs and hard choices. Some think the prime minister’s insistence on ditching the Luxembourg court may start to look a little rash. Britain may think it has lost interest in the ECJ. But the court may well retain an interest in Britain. ■



Also in this section

44 The Tories and their opponents

45 Bagehot: Brexit and Gibraltar

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The NHS and social care

Paying for grandpa

The government is prepared to put more cash into social care—but it may also shake up the way the system is financed

ALING, “sick to the bone”, not wanting “sticking-plaster solutions”—the raft of journalistic metaphors for the National Health Service can seem as crowded as a hospital emergency room. But almost everyone agrees with a report this week from Parliament’s Public Accounts Committee (PAC), that the financial health of the NHS continues to deteriorate at an alarming rate, that this is affecting the quality of care, and that the situation is unsustainable. Deficits are building up right across the NHS. Demand for health care from an ageing population continues to rise. And an erosion of funding for social care, public health and district nursing has left hospitals flooded with people who should not be there but are unable to leave.

This is the background to some intriguing briefing by the government this week. The prime minister’s office told journalists, ahead of next week’s budget from Philip Hammond, the chancellor of the exchequer, not only that there will be a cash injection for social care, but also that “significant reform” is likely later this year.

After a decade of free spending under Labour and nearly as long a period of austerity under the Tories, it seems that Mr Hammond and Theresa May, the prime minister, are considering big reforms. With cuts to social care causing such problems for the NHS, the most radical idea is to change how it is paid for, either to a form of

social insurance or to a levy on inherited wealth, says Andrew Haldenby of Reform, a think-tank. Both would overturn 70 years of thinking about how the welfare state should be financed. As Mr Haldenby asks, “Who would have thought that Theresa May and Philip Hammond were welfare-state revolutionaries?”

There is little dispute about the present system’s dire condition. In January the Red Cross said the NHS was facing a “humanitarian crisis”, as 20 hospitals became so overcrowded they could no longer guarantee patient safety. Occupancy rates in some hospitals stand at almost 100%. Only 86% of those coming to hospital emergency rooms in December were treated within

the desired time of four hours, the worst rate ever recorded and well below the NHS’s 95% target.

The finances look equally dire. The PAC report says that total deficits of NHS trusts reached £2.5bn (\$3.1bn) in 2015-16, up from £859m in 2014-15. Two-thirds of trusts reported deficits in 2015-16, up from 44% a year earlier. An extra £1.8bn of “sustainability funding”, which trusts received in 2016-17, has not wiped out their deficits. At least the NHS gets extra money. Local authorities, which are responsible for adult social care, saw spending on it fall by 10% in real terms between 2009-10 and 2014-15.

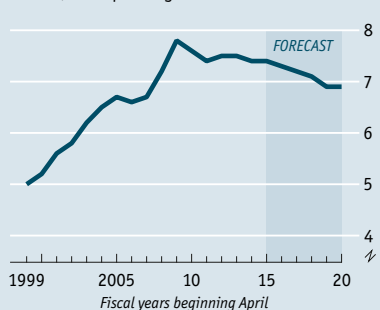
Faced with such pressures, the health department has resorted to raiding the separate capital budget for long-term investment, moving £950m into its revenue budget in 2015-16. It says it will probably have to do this again. The unfunded commitment to introduce a seven-day NHS is making things even more difficult.

There are three possible answers. The first is just to put more cash in. Tony Blair and Gordon Brown threw money at the NHS, doubling spending in real terms in the decade to 2010. As a share of GDP, spending is now falling (see chart), but Mr Hammond has repeatedly said there is no new money available.

A second option is to promote new models of care in the NHS. There are now in place 44 Sustainability and Transformation Plans (STPs), new bodies across England that include all health organisations within one area, as well as the local council. Their aim is to strengthen preventive care and integrate health and social care more closely. Yet although there has been some progress, a report by Reform suggests that STPs lack executive authority and consistent vision, and need pooled budgets, commissioned by a single body, to over- ▶▶

Up and then down

Britain, NHS spending as % of GDP



Sources: John Appleby, Nuffield Trust

► come barriers to working together. They seem, at best, a longer-term answer.

The third solution is the most controversial: a social-insurance scheme or an inheritance levy to raise more money for social care. In Germany social insurance deducts money directly from pay cheques, as is done for the state pension in Britain. Doing this would give Britons an entitlement to social care that is not reliant, as now, on a means test. The inheritance levy could be another way to rebalance the taxation of work and wealth. It is based on the argument that young people with neither houses nor pensions should not have to pay more tax so that older people who have both can avoid drawing on them to pay for their social care.

Suddenly, almost anything could be on the table, from social insurance to a com-

pulsory levy on estates worth more than a certain amount to a review of the inheritance-tax cut announced by Mr Hammond's predecessor, George Osborne, which was due to come into effect this April at a cost of some £900m a year. The Treasury dislikes hypothecated taxes, and the Tories once condemned the very notion of a "death tax". But Mrs May might now pick the idea up as part of her plan to tackle inequality and to promote greater social mobility, suggests Mr Haldenby.

This is a big moment, agrees Richard Humphries of the King's Fund, another think-tank. "It looks like the government is prepared to think the previously unthinkable in terms of how to fund social care." The inheritance tax is a sensible idea, he adds. Anything to help resuscitate hard-pressed health- and social-care budgets. ■

The Tories and their opponents

Monarch of all she surveys

Theresa May now faces little political opposition in England—but lots in Scotland

AT AROUND 3am on February 24th Theresa May was woken by a text message that excited her so much she roused her husband. The Conservatives had just won Copeland, a Cumbrian constituency held by Labour since 1935. This is the first by-election since 1982 when the ruling party has taken a seat from the opposition. Hours later the prime minister flew up to address delighted Copeland campaigners, hailing the "astounding result" as proof that her party stood for "everyone across the whole country". The Tories are polling above 40%, and the latest ICM survey gives them a near-record 18-point lead over Labour. Not since Tony Blair at his peak has a prime minister seemed so dominant.

Mrs May is partly the creator of her own pre-eminence. Moving her party left on economic issues (with talk, albeit barely substantiated, of a new industrial strategy) and right on social ones (making immigration cuts the overriding priority of her Brexit plans) has helped her to eat into Labour territory in places like Copeland and closed off political space to the right once colonised by the populist UK Independence Party (UKIP). But on both fronts, she is also lucky.

Jeremy Corbyn's far-left Labour revolution was always going to boost the Tories. It is now eating itself. Lefties who once supported the Labour leader are abandoning him. Simon Fletcher, architect of his leadership victory in 2015, has resigned. After Copeland, the boss of Unison, a supportive union, insisted that Mr Corbyn "must



Theresa the dominant

take responsibility". The beginning of the end of the Corbyn era seems nigh. He wants to enact reforms lowering the number of nominations by (anti-Corbyn) MPs that are needed for prospective leaders to go before the (pro-Corbyn) membership; once that is done he will come under new pressure from left-wing allies to make way, perhaps for Rebecca Long-Bailey, the shadow business secretary. But the process could still take some years.

UKIP might just have swept into the vacuum created by Labour to put Mrs May under pressure. But it is being obligingly useless. For the Stoke Central by-election

on the same day as Copeland, the party boasted of its chances in "the capital of Brexit". It even chose its new leader, Paul Nuttall, as candidate. But he ran a chaotic campaign marred by false claims on his website and eventually lost to Labour. For good measure UKIP has spent the aftermath tearing itself apart. Nigel Farage, its former leader, openly criticised Mr Nuttall. Then he and Arron Banks, a big donor, said that UKIP's only MP, Douglas Carswell, should be sacked, seemingly to punish him for failing to secure a knighthood for Mr Farage himself.

An absence of effective opponents is bad for a ruling party, because it makes mistakes more likely. Four forces now constitute the real opposition in England: the pound, Europhile Tories, the House of Lords and the Liberal Democrats. Mrs May's espousal of a "hard" Brexit has sent the currency tumbling, hurting living standards. Pro-European forces in her party are becoming louder: this week Sir John Major, a former prime minister, criticised ministers for being overly optimistic about Brexit and called for "a little more charm, and a lot less cheap rhetoric". On March 1st the Lords amended the bill authorising Mrs May to begin Brexit talks, demanding that EU nationals' rights in Britain be guaranteed. And some Tories fret that the Lib Dems could cost the party support in EU-friendly parts of the country.

Yet none of these is truly formidable. The pound's fall cannot easily be politicised. Europhile Tories are a small minority within the party. Peers have made clear that they will not seek to stop Mrs May from triggering the Brexit process. And the Lib Dems have just nine MPs.

North of the border, however, is another matter. There the dominance of Nicola Sturgeon, first minister and leader of the Scottish National Party, matches Mrs May's to the south. The Scottish Labour Party, previously firmly entrenched in power, held a shambolic conference on February 24th-26th, at which Mr Corbyn failed to endorse its leader's proposal for a federal Britain and Sadiq Khan, the Labour mayor of London, caused a storm by appearing to call the nationalists bigoted. "It was a car crash," chuckles a senior SNP official.

A crucial battleground in British politics over the coming years will be the clash between Mrs May and Ms Sturgeon. Noting that Scotland voted strongly to stay in the EU, Ms Sturgeon said this week that a second independence referendum would be a "legitimate, almost necessary" step if Scotland is dragged into a "hard Brexit". She may announce a new plebiscite within weeks, in the hope that Scotland might be able to leave Britain before Britain leaves the EU. Mrs May seems to be taking the possibility seriously. Recently she told her cabinet to prepare to make the case for the union once again. ■

Bagehot | The parable of Gibraltar

Britain's relationship with Spain will be tested by the Brexit talks



DAWN'S rays crest the palm and date fronds. Lights on the African coast pulsate gently through the February haze. In the shadows falling from the sloping rock, a line of mopeds, vans and cars backs up along the Spanish coast road. The air tastes of exhaust. Parents with children hurry along the pavement towards the border. Clearing passport control, they pass a red telephone box and a swish new airport terminal. The driver of the bus into town switches between English and Spanish as they clamber on, then motors across the runway (when planes land, barriers drop and the peninsula is briefly cut off).

From the air Gibraltar looks like a swollen appendix: a thin, distended finger emanating off southern Spain. It is an appendix figuratively, too: a strange relic of the past. Gibraltar was in Phoenician, Roman, Moorish and then Spanish hands before, in 1713, it passed to Britain under the Treaty of Utrecht. Over centuries as a cosmopolitan port—the gateway to the Mediterranean—it has attracted Genoese, Jews, Maltese, Moroccans, Britons and Spaniards, making Gibraltarians a cosmopolitan, mongrel bunch. They switch from English to Spanish and to Llanito (a local dialect of Spanish) between sentences, even within them.

Yet the place is almost provincially British, from the plug sockets and peep-peep of the traffic lights to the ubiquitous union flags, pubs with names like “The Horseshoe” and British chain stores. The architecture sums up the contradictions: Edwardian houses with sash windows mingle with yuppie flats and recognisably Mediterranean buildings, all flat roofs and big shutters. Think Portsmouth meets Tel Aviv.

On June 16th, a week before Britain's referendum on leaving the European Union, David Cameron flew to Gibraltar to address its overwhelmingly anti-Brexit population. The rally was expected to be a giant boost for the Remain campaign. “The nine o'clock news would have been covered by very, very patriotic Brits waving union jacks and European flags... we would have given David Cameron a send-off like he'd never had before,” says Fabian Picardo, the chief minister. But on landing the prime minister learned that Jo Cox, a Labour MP, had been murdered in her constituency. The rally was cancelled, Gibraltar went on to vote 96% against Brexit (the highest of any part of Britain) and the country went the other way. “A real emptiness, a real sadness, a real con-

cern” filled the streets on June 24th, recalls Mr Picardo.

Now Gibraltar is grappling with the consequences. Its economy has thrived from an influx of financial-services firms attracted by low taxes and a skilled workforce. Some 15% of all Britain's car insurance and 60% of its online betting is done through Gibraltar. Nonetheless, pointing out that 90% of its trade is with Britain, Mr Picardo does not see membership of the European single market as the biggest issue. That is freedom of movement of people. A report published by the EU committee of the House of Lords on March 1st notes that Gibraltar's population swells by about 10,000, or a third, every day as Spaniards commute in to work. If the border were shut, Gibraltar would suffer a catastrophic shortage of labour.

There are also wider concerns that affect Britain as a whole. Spain has long resented its control of Gibraltar and some in the centre-right government there call the Brexit vote an “opportunity” to claim it back in some way. On June 24th José Manuel García-Margallo, Spain's then foreign minister, proposed a “co-sovereignty” deal. The locals are having none of it. “A dead duck. Still born. They don't understand what the word ‘no’ means,” snaps Mr Picardo, exasperated by what he calls the “intellectual nonsense and upside down thinking” emanating from Madrid. The British government emphatically agrees with him.

Spain's tone has softened since then, aided by the appointment in November of Alfonso Dastis, a European-minded pragmatist, to the foreign ministry and by pressure from the Andalusian government, which is worried about the economic effects of a hard border on the surrounding, unemployment-hit region. Nonetheless, Spain does not have to demand total control over Gibraltar to muddy the Brexit talks. One flashpoint will be the airport, which sits on partly reclaimed land across the peninsula's isthmus. Spain does not believe the Treaty of Utrecht covers this, so blocks all legislation that treats Gibraltar's airport as British. Attempts to keep Britain in the European aviation market—essential for keeping down air fares—may meet a Spanish veto.

In a negotiation that will need much bilateral diplomacy, Britain's dealings with Spain may be especially sensitive. For Gibraltar is but one of a trio of fiddly issues. The second is the status of Britons in Spain, more than in any other EU country, often unregistered, mostly ageing and some of whose health care is paid for by Spanish taxpayers. The third is Scotland. Madrid is neuralgic about special treatment for the Scots that might spur on the Catalans, who want an independence referendum of their own in September.

Scissors, paper, rock

That is the thing about leaving the EU. Europe is an old continent, wracked with conflicts and tensions, mutual interests and antagonisms, commonalities and differences. The union, in all its imperfection, broadly contains these in the interests of harmony and prosperity. It was the prospect of membership, for example, that persuaded Spain to reopen the border with Gibraltar in 1982, 13 years after it had shut it. Pulling out of the club risks melting the glue that holds some of these fractures together. The Northern Ireland peace settlement, Britain's own union, disputes with neighbours over fishing rights, trade and crime: these are the accumulated complexities left after millennia of mixing and mingling. Gibraltar—exotic and yet familiar, so European by vocation but so British in feel—sums them up. The dark clouds over the peninsula hang over the motherland as well. ■



Deportation

Exit strategies

ADELANTO, BERLIN AND LONDON

Removing unauthorised immigrants is difficult and expensive. But rich countries are trying ever harder

TEARS stream down Arturo's cheeks and onto his red jumpsuit as he imagines being deported to Mexico. Deep grooves line his face, a map of the hardships he has experienced since coming to America illegally three decades ago, aged 14. He got mixed up in a bad crowd and was convicted of six armed robberies. After 14 years in jail he was moved to the Adelanto immigration detention facility in the Californian desert, where he has spent the past three years. "I made some big mistakes, I know that," he says. "But I did my time and I'm a different person now." His mother, wife and friends are all in California. Yet, with little prospect of being granted leave to remain, he may soon be on a bus to Mexico, where he knows hardly anyone.

Nearly 10,000km away, in a refugee camp in Berlin, Aws, a 30-year-old Iraqi who travelled to Europe via Turkey on a flimsy boat, has been denied asylum after two years in Germany. He is appealing; a final decision could take another two years. In Iraq he was a driver for the American army, and he is fearful of being targeted by militants if he returns. He wants to open a shop in Berlin, but while he waits he is not allowed to work. He is despondent—and bored. "I've wasted two years of my life," he sighs.

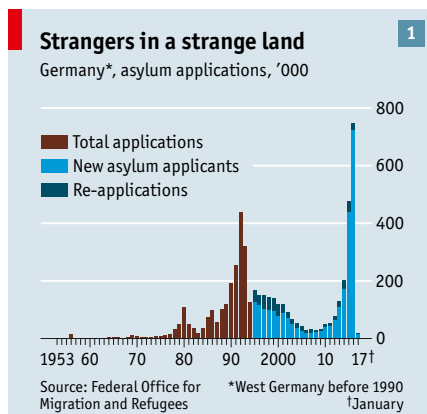
Irene Clennell must have thought that

having a British husband and children, and living in Britain for nearly 30 years, would be enough to let her stay there. She was mistaken. In January she was hauled off to a detention centre in Scotland and on February 26th she was put on a flight to Singapore, where she was born. In the 1990s she was granted open-ended permission to remain in Britain, but it lapsed after she spent several years in Singapore looking after her ageing parents. Her later re-applications to live in Britain, where she cared for her sick husband, were denied. After spending time in Britain on a visitor visa she was detained, and then deported with £12 (\$15), no

change of clothes and no one lined up to stay with in Singapore.

America, Germany and Britain are all, in different ways, using deportation as part of their efforts to handle unauthorised economic migrants and failed asylum-seekers—and to respond to rising nativist sentiment. On February 21st America's Department for Homeland Security (DHS) published new guidelines intended to ensure that more illegal immigrants are deported, more speedily. In Germany a proposed law would make it a bit easier to deport failed asylum-seekers, after nearly 1.2m immigrants applied for asylum from the beginning of 2015 (see chart 1). And, as Britain prepares to leave the European Union, its government has restated its aim to cut net annual immigration, now running at around 300,000, to under 100,000. The target, set in 2010, has driven immigration policy ever since.

Barack Obama deported more unauthorised immigrants than any previous president, but most had been caught near the border. By the end of his second term few were deported from the interior of the United States unless they had criminal records (see chart 2 on next page). In 2011 67% of those removed from the interior fitted that description; by 2016 it was 92%. Now, however, Donald Trump has said that Immigration and Customs Enforcement (ICE) will seek to deport any who have "committed acts which constitute a chargeable criminal offence", misrepresented themselves to a government agency or "abused" any public benefits programme. Since so many use fake documents or entered the country without going through passport control, this probably includes almost all of them: an estimated 11m, mostly from ►►



► Mexico, Central America and Asia.

John Kelly, the boss of DHS, has said he intends to make it easier to carry out deportations without a court hearing. At the moment, only illicit migrants found within 100 miles of America's border who cannot prove they have been in the country for more than 14 days can be removed without being brought before a judge. Mr Kelly has floated the idea of extending such expedited removal to the whole country, and increasing the 14-day limit to two years.

The DHS also wants to work more closely with local law-enforcement agencies. But not all are willing. Some of the largest cities, including New York, San Francisco and Chicago, have declared themselves "sanctuaries", arguing that if their police are known to work with federal immigration authorities, immigrants will be less likely to co-operate with them or report crimes. Some jurisdictions ban police from asking members of the public about their immigration status. Others refuse to notify ICE when releasing inmates from custody, or to smooth the transfer of inmates to deportation centres by holding them past their scheduled release dates.

Mr Trump has threatened to cut federal funding from places deemed unco-operative, though it is not clear that he can do so legally. He has also vowed to build a wall along the border with Mexico and to increase the number of Border Patrol agents from 21,000 to 26,000. Both policies would be wildly expensive. America already spends \$19bn a year on immigration enforcement, more than on the Federal Bureau of Investigations, Drug Enforcement Agency and Secret Service combined. By one estimate, the wall alone will cost \$21.6bn. And an extra 5,000 Border Patrol agents would add around \$900m to an annual staffing budget of \$3.8bn.

It is also unclear whether immigration enforcement near the border can become any stricter. Fewer migrants are arriving from Mexico, not least because the Mexican government has sought to stop Central Americans passing through to get into the United States. The number of expedited removals from the border area is already high. And even if more of the illegal immigrants in the interior are detained, it will be difficult to remove them. Immigration courts are already overwhelmed; in Los Angeles, queues outside regularly stretch around the block. The number of immigration cases pending nationwide has risen from 175,000 a decade ago to 542,000.

Attempts to expand the use of expedited removal would be challenged in court, says Omar Jadwat, a lawyer for the American Civil Liberties Union, an advocacy group. And anyway, two-thirds of unauthorised adult immigrants have been in America for at least a decade, according to the Pew Research Centre, a think-tank, meaning that even with a two-year cut-off

they could not be summarily removed.

As America prepares to beef up its giant deportation system yet further, Germany is building one almost from scratch. Although it is processing asylum claims impressively quickly, considering the large number of recent arrivals, some inevitably fail—and Germans are queasy about what should happen next. Deportation, for many, smacks of the Nazi era. The Social Democrats and Green Party oppose it in pretty much all circumstances.

Decisions on asylum are made by the Federal Office for Migration and Refugees. But it is states that are responsible for removing applicants whose claims fail. Those with left-leaning administrations drag their feet. Although the federal government struck a deal with Afghanistan in October to return its citizens whose asylum applications had failed, Berlin is refusing to return Afghans, deeming their country too dangerous. Nationally, just 77 Afghans have been returned, though 12,000 have been refused the right to remain. More than half of recent deportations have been to three European countries, Albania, Kosovo and Serbia, and hardly any to the Middle Eastern and African ones from which most of the recent immigrants came.

In some cases locals have helped migrants to move into churches, from which they cannot be removed. Deportation is barred for those who cannot get passports from their home countries, or who have medical problems. Some countries, particularly in Africa, refuse to take their citizens back. The result is a fast-growing population of immigrants who have no right to remain. Although more than 25,000 people were deported in 2016, up from 11,000 in 2014, Germany now holds 300,000 failed asylum-seekers who have been told they must leave. That figure is expected to be nearly 500,000 by the end of this year.

Many Germans remain relatively sanguine about the influx: in January 57% said they thought their country could absorb a high number of refugees. But after a failed asylum-seeker from Tunisia killed 12 peo-

ple in Berlin in December, removal has risen up the political agenda. In the same poll, two-thirds said that Germany needed a tougher deportation law.

A bill approved by the government on February 22nd would, if passed by parliament, take some small steps in that direction. Asylum-seekers whose claims are rejected would have to stay in the area where they were registered, to make it easier to keep track of them. Those thought to be a danger to society could be electronically tagged or, in some circumstances, taken into custody. Germany needs to become a "normal immigration country", says Daniel Thym of the Expert Council of German Foundations on Integration and Migration. He thinks Germans are starting to understand that deportation is an essential part of a functioning asylum system.

This island's mine

Tucked away at the edge of Europe and surrounded by sea, Britain has neither large numbers of unauthorised economic migrants, like America, nor of asylum-seekers, like Germany. Only about 30,000 people applied for asylum in Britain last year. Figures for illegal immigrants are murky, but an estimate in 2009 by the London School of Economics put the total at 618,000. Most are thought to have arrived legally and overstayed their visas, or to have applied for and been denied asylum.

But in recent years many more people have taken advantage of the EU's freedom-of-movement rules to come to Britain than to leave it. Almost all economists agree that Britain has benefited: it mostly exports retired people and imports Europeans of working age. Even so, rising discontent with immigration has led the government to stick with the 100,000 a year target for net immigration—and to seek a "hard" Brexit that puts ending freedom of movement ahead of staying in the single market.

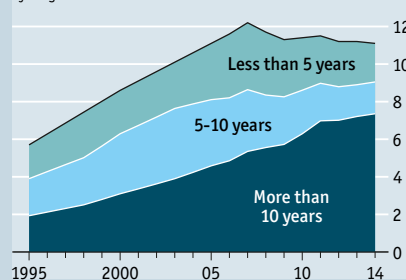
Worryingly for the 3m citizens of other EU countries living in Britain, their immigration status after Brexit is uncertain. The prime minister, Theresa May, says that she wants to allow them to remain and work, ►

Removal man

United States

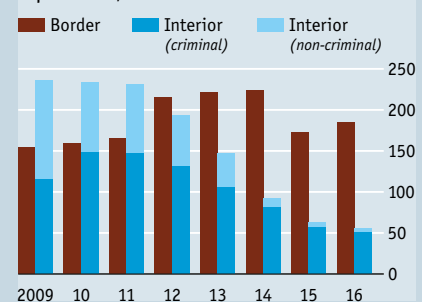
Unauthorised immigrants, m

By length of residence in United States



Sources: Centre for Immigration Studies; Pew Research Centre; US Immigration and Customs Enforcement; The Economist

Deportations, '000



▶ and is waiting only for the 27 other EU countries to guarantee the same for their British residents. But whereas many other European countries have population registration systems, meaning their British immigrants will easily be able to prove that they are residents, Britain does not.

Since the Brexit vote, thousands of EU citizens have applied for formal recognition of their status in Britain by using a complex system modelled on that for migrants from outside Europe. More than a quarter have been rejected, including long-term resident spouses of British citizens, often because of an obscure rule that economically inactive immigrants must have private health insurance. The European Commission says that the requirement breaches free-movement rules, since EU citizens are entitled to use the public National Health Service.

In 2016 British authorities used immigration powers to detain around 4,700 citizens of other EU countries, up from 768 in 2009, the year before the 100,000 target was set. Some had committed serious crimes; others were vagrants (EU rules allow the removal of immigrants who have no means of support). But among the infringements cited were the loss of a foreign identity card and holding a birthday party in a public park. As a share of those detained under immigration law, EU citizens now make up 16%; of those who are removed they make up almost a third.

Endless days

Britain is the only European country to allow indefinite detention under immigration laws. Some of those held are migrants who have committed crimes but cannot be removed, because their home countries are too dangerous. But of those detained last year, more than two-fifths ended up being released. This suggests poor decision-making about who is detained in the first place, says Colin Yeo, an immigration lawyer. Sweden, which gets far more asylum-seekers than Britain, also manages to return a far higher share of those whose claims fail.

Sweden also has just a tenth as many places in detention centres as Britain does. Rather than locking up immigrants whose applications to remain have failed, officials help them to arrange travel home and to try to work out where they will live and what they will do when they get there. Migrants processed in Sweden feel that they understand the system, says Jerome Phelps of Detention Action, a charity, and so are more likely to accept a decision that they should leave.

In recent years Britain's government has shifted its focus to trying to persuade unauthorised immigrants to leave of their own accord. In 2013 Mrs May, then the home secretary, put up posters and sent vans around British cities emblazoned



A long way from home

with: "In the UK illegally? Go home or face arrest". The next year it became government policy to create a "hostile environment", by denying unauthorised immigrants bank accounts and driving licences, making it harder for them to get health care and fining landlords who did not check their tenants' immigration status. In 2016 forced returns of migrants fell by 15% compared with 2014; those of failed asylum-seekers fell by 53%.

But there is little evidence that hostile-environment policies do anything except encourage illegal immigrants to steer clear of the authorities: the posters and vans were abandoned after being deemed a failure. Meanwhile, the attempt to squeeze net immigration down means applications to enter or settle in Britain seem to be denied whenever possible, rather than being decided on their merits.

People whose applications to remain are denied are not supposed to be returned to countries where they are at risk. But the requirement has been relaxed in recent years, says Maddy Crowther of Waging Peace, a group that helps Sudanese asylum-seekers. Darfuris used to be recognised as at risk of mistreatment; officials now say they can be sent back to other parts of Sudan. Ms Crowther says those deported can be subjected to what her organisation describes as torture but officials call "rough handling".

After Nadia's father was killed and her mother was kidnapped by the Janjaweed (a homicidal government-backed militia), she returned to her village in Darfur with her fiancé. He was killed in another attack; she was shot in the leg and raped. When she returned to Khartoum she was seized by security forces who accused her of being a rebel, and beat and raped her. Desperate to leave, she applied for a visa to study in Britain. Under the mistaken impression that her student status meant she could not

apply for asylum in Britain, she applied in Ireland instead. After she was rejected, on the ground that with her qualifications she should be able to find work in another part of Sudan, she applied in Britain, once more without success. Only after a series of appeals and periods of detention, during which she suffered flashbacks, was she finally granted asylum.

Decisions on student and work visas are also being tightened. Shiromini Satkunarajah, a Sri Lankan national, arrived in Britain eight years ago, aged 12, with her father, who held a student visa. After his death in 2011 she was allowed to stay to finish her schooling. She had almost finished a degree when she was told she must leave. In February she was held for a week in Yarl's Wood detention centre, before being released after a national outcry. What makes the case ridiculous as well as brutal is that her skill—engineering—is recognised by the government as being in short supply, meaning that engineering jobs can be offered to people from outside the EU without having to be advertised in Britain first.

The cost of detention and deportation is pushing some places to look at other options. A bed in ICE's adult facilities costs the American taxpayer \$129 a day. Forced removals are also pricey, partly because immigration officials must usually accompany the deportee. In 2015 chartering a flight from Germany to Georgia to return 20 failed asylum-seekers cost €163,000.

Keeping tabs on unauthorised immigrants under a system similar to parole, with electronic ankle tags, telephone check-ins and unannounced house visits, is cheaper and more humane. And as a substitute for deportation, in the past few years Germany has sought to increase the number of "voluntary assisted returns". The idea is to offer failed asylum-seekers a modest but useful amount of cash and a plane ticket home. Last year 54,000 took up the offer, up from 35,000 in 2015 and 13,000 in 2014. A sliding scale has recently been introduced to encourage early voluntary departure: an asylum-seeker whose claim looks unlikely to succeed and withdraws his application will get an extra €1,200. If it is rejected and he does not appeal, he gets around €800.

When it's time to say goodbye

But no matter how fairly and quickly immigration applications are heard, some will be rejected—and some migrants will not go home. In Germany, 150,000 failed asylum-seekers who are supposed to leave have been granted a semi-formal "tolerated" status which gives them access to health care and a small amount of cash; some are allowed to work. Only by integrating those who stay can countries avoid creating a long-term illegal underclass like America's, and poisoning politics for decades to come. ■



Health care

The wonder drug

Digitising the health-care industry is a huge business opportunity

WHEN someone goes into cardiac arrest, survival depends on how quickly the heart can be restarted. Enter Amazon's Echo, a voice-driven computer that answers to the name of Alexa, which can recite life-saving instructions about cardiopulmonary resuscitation, a skill taught to it by the American Heart Association. Alexa is accumulating other health-care skills, too, including acting as a companion for the elderly and answering questions about children's illnesses. In the near future she will probably help doctors with grubby hands to take notes and to request scans, as well as remind patients to take their pills.

Alexa is one manifestation of a drive to disrupt an industry that has so far largely failed to deliver on the potential of digital information. Health care is over-regulated and expensive to innovate in, and has a history of failing to implement ambitious IT projects. But the momentum towards a digital future is gathering pace. Investment into digital health care has soared (see chart on next page).

One reason for that is the scale of potential cost-savings. Last year Americans spent an amount equivalent to about 18% of GDP on health care. That is an extreme, but other countries face rising cost pressures from health spending as populations age. Much of this expenditure is inefficient. Spending on administration varies sevenfold between rich countries. There are huge differences in the cost of medical pro-

cedures. In rich countries about one-fifth of spending on health care goes to waste, for example on wrong or unnecessary treatments. Eliminating a fraction of this sum is a huge opportunity.

Consumers seem readier to accept digital products than just a few years ago. The field includes mobile apps, telemedicine—health care provided using electronic communications—and predictive analytics (using statistical methods to sift data on outcomes for patients). Other areas are automated diagnoses and wearable sensors to measure things like blood pressure.

If there is to be a health-care revolution, it will create winners and losers. Andy Richards, an investor in digital health, argues that three groups are fighting a war for control of the “health-care value chain”.

One group comprises “traditional innovators”—pharmaceutical firms, hospitals and medical-technology companies such as GE Healthcare, Siemens, Medtronic and Philips. A second category is made up of “incumbent players”, which include health insurers, pharmacy-benefit managers (which buy drugs in bulk), and as single-payer health-care systems such as Britain's NHS. The third group are the technology “insurgents”, including Google, Apple, Amazon and a host of hungry entrepreneurs that are creating apps, predictive-diagnostics systems and new devices. These firms may well profit most handsomely from the shift to digital.

Also in this section

- 52 A smartphone fest in Barcelona
- 52 The woes of Uber's boss
- 53 Samsung's heir is indicted
- 53 Scrapping ships
- 54 Business in Rwanda
- 55 A corruption probe into Eni
- 56 Schumpeter: The British experiment

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The threat to the traditional innovators is that as medical records are digitised and new kinds of patient data arrive from genomic sequencing, sensors and even from social media, insurers and governments can get much better insight into which treatments work. These buyers are increasingly demanding “value-based” reimbursement—meaning that if a drug or device doesn't function well, it will not be bought.

The big question is whether drug companies will be big losers, says Marc Sluijs, an adviser on investment in digital health. More data will not only identify those drugs that do not work. Digital health care will also give rise to new services that might involve taking no drugs at all.

Lunches eaten

Diabetes is an obvious problem for the pharma business in this regard, says Dan Mahony, a partner at Polar Capital, an investment firm. Since evidence shows that exercise gives diabetics better control of their disease (and helps most pre-diabetics not to get sick at all), there is an opening for new services. UnitedHealthcare, a big American insurer, for example, has a prevention programme that connects pre-diabetics with special coaches at gyms.

An app or a wearable device that persuades people to walk a certain distance every day would be far cheaper for insurers and governments to provide than years of visits to doctors, hospitals and drugs. Although Fitbits are frequently derided for ending up in the back of a drawer, people can be motivated to get off the sofa. Players of Pokémon Go have collectively walked nearly 9bn kilometres since the smartphone game was released last year.

That is the backdrop to a new firm called Onduo, a joint venture that Google's health-care venture, Verily Life Sciences, ►

▶ and Sanofi, a French drug firm, set up last year. Onduo will start by developing ways to help diabetics make better decisions about their use of drugs and their lifestyle habits. Later on, Onduo wants to help those who are at risk of diabetes not to develop it. The startup is a good hedge for Sanofi, which faces a slowdown in sales of its blockbuster insulin medication, Lantus, which lost patent protection in 2015.

This kind of thinking does not come easily to drug firms. Switzerland's Novartis is one of the few to have acknowledged that digital innovation will mean selling products based on patient outcomes. But if pharma firms do not design solutions that put the patient, rather than drug sales, at the centre of their strategy, they risk losing relevance, says Mr Sluijs.

Large hospitals, some of which count as both incumbents and traditional innovators, will also be affected. The rise of telemedicine, predictive analytics and earlier diagnoses of illnesses are expected to reduce admissions, particularly of the emergency kind that are most lucrative in commercial systems. The sickest patients can be targeted by specialist services, such as Evolution Health, a firm in Texas that cares for 2m of the most-ill patients across 15 states. It claims to be able to reduce the use of emergency rooms by a fifth, and inpatient stays in hospitals by two-fifths.

Rapid medical and diagnostic innovation will disrupt all businesses that rely heavily on physical facilities and staff. A mobile ultrasound scanner made by Philips, called Lumify, means that a far larger number of patients can be seen by their own doctors. As for data-based diagnostics, one potential example of its power to change business models is Guardant Health, a startup that is analysing large quantities of medical data in order to develop a way of diagnosing cancer from blood tests. If the firm can devise an early test for breast cancer, demand for mammograms and the machines that take them would fall, along with the need for expensive drugs and spells in hospital.

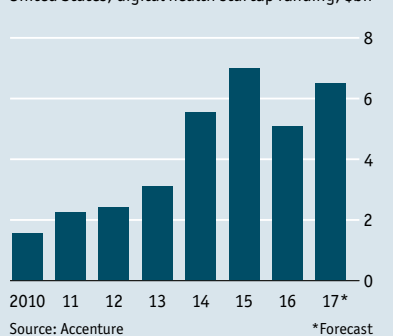
From ER to AI

There is also good news for hospitals, however. Increasingly, machine-learning programs are able to make diagnoses from scans and from test results. An intriguing recent project has been to stream and analyse live health data and deliver alerts on an app that is carried around by doctors and nurses at the Royal Free Hospital in London. The app, which is the work of DeepMind, a British artificial-intelligence (AI) research firm owned by Google, identifies the patients at greatest risk of a sudden and fatal loss of kidney function. The Royal Free says that the app is already saving nurses' time.

Naturally enough, the health-care entrepreneurs have the boldest visions. The

Adrenaline rush

United States, digital health startup funding, \$bn



point of care will move rapidly into the home, they say. People will monitor their heart conditions, detect concussions, monitor the progress of diseases and check up on moles or ear infections using apps, mobile phones and sensors. Last year the FDA approved 36 connected health apps and devices. A new app, called Natural Cycles, was recently approved in Europe for use as a contraceptive. Its failure rate for typical use was equivalent to that of popular contraceptive pills. A smartphone may eventually be able to predict the onset of Alzheimer's, Parkinson's or even the menopause (if the information is wanted).

In emerging economies, where regulations on health data are less onerous and where people often already expect to pay to see a doctor, there is faster growth and innovation. China, which is building 400 hospitals a year, saw its two largest VC investments in digital health care last year. One went into a Chinese medical-service app, Ping An Good Doctor, which raised \$500m; a video-consultations app called Chunyu Yisheng raised \$183m. India is another innovator. To take one example, LiveHealth, based in Pune, is an app that lets patients assemble all their health records in one place, see test results and communicate with doctors.

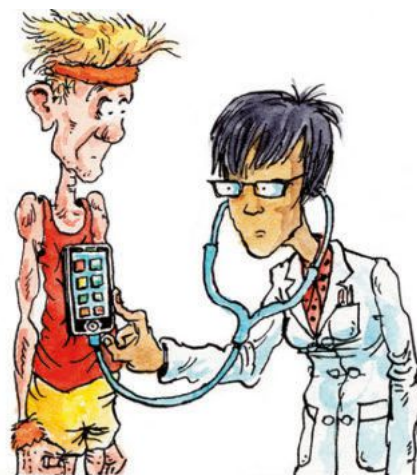
In the short term, the greatest disruption will come from a growing array of apps in many countries around the world that give consumers direct access to qualified GPs on their mobile phones. Overall, telemedicine is expected to grow rapidly. In America, GPs will conduct 5.4m video consultations a year by 2020, says IHS Markit, a research firm. Britain's NHS is testing a medical AI from a London-based startup called Babylon which can field patients' questions about their health. A paid service called Push Doctor offers an online appointment almost immediately for £20 (\$24). The firm maximises the efficiency of its doctors by reducing the time they spend on administrative duties. They spend 93% of their time with patients compared with only 61% in Britain's public sector. Babylon reckons that 85% of consultations do not need to be in person.

In the longer term, the biggest upheaval may come from the large technology firms. Amazon and Google are not the only giants to be stalking health care. Apple has expressed a strong interest in it, though it is taking time to decide exactly what it wants to do. For several years it has provided a way of bringing together health data on its iPhone, and tools for health researchers to build apps. As personal-health records accumulate on its platform, from sensors such as Fitbits to medical-grade devices, it will encourage more app development.

An app using data from an iPhone or another smartphone might be able to warn users that a sedentary lifestyle will exacerbate a heart condition or that, based on social-media patterns, they are at risk of depression, for example. Apple and other tech firms may also be able to help patients take greater control of their existing health records. For now medical records mostly remain under the guard of those who provided the care, but this is expected to change. If patients do gain proper access to their own data, Apple is in a particularly strong position. Its platform is locked and fairly secure, and the apps that run on it are all screened by the firm.

None of this will materialise quickly. Regulated health-care systems will take time to deal with concerns over accuracy, security and privacy. In Britain the Royal Free is already under scrutiny over how it shared its patients' data. That suggests a broader worry: that technology companies are too cavalier with their users' data. Such firms typically use long agreements on data rights that are hard for individuals to understand. The medical world places importance on informed consent, so a clash of cultures seems unavoidable.

Yet enormous change looks inevitable. Investors hope for billion-dollar health-tech "unicorns". Payers eye equally sizeable savings. Amid such talk it is worth remembering that the biggest winners from digital health care will be the patients who receive better treatment, and those who avoid becoming patients at all. ■





Mobile phones

The new old thing

BARCELONA

Conformity, nostalgia and 5G were on show at the Mobile World Congress

“A SEA of sameness.” A veteran of the Mobile World Congress (MWC), Ben Wood of CCS Insight, a consultancy, was not expecting much from the mobile industry’s main trade show this week in Barcelona. As one product launch followed another, it was easy to lose track. Whether it was LG, Huawei or Wiko, they all showed off yet more black rectangles with slightly varying specifications.

Another reminder of the smartphone business’s maturity was that the most talked-about new device was the Nokia 3310 feature phone (pictured), an updated version of a phone first made 17 years ago. With limited internet connectivity, it appeals partly as a “digital detox”, said Arto Nummela, chief executive of HMD Global, a Finnish startup with ex-Nokia executives which licenses the brand.

The mobile industry is far from done in terms of genuinely new products. But the action has moved to parts of the business that do not lend themselves to splashy events and massive crowds (the tent erected by Huawei, a Chinese maker of all sorts of telecoms gear, to launch its new P10 smartphone was huge, but hundreds were still left waiting outside). Most innovation in the next ten years will happen in the telecoms network rather than in devices, predicts John Delaney of IDC, a market-research firm.

For now the industry is gearing up for the next generation of wireless technology, “5G”. In time for MWC the International Telecommunication Union, a UN agency, agreed on the specifications for 5G: speeds must be up to 20 gigabits

per second, enough to download a movie in a few blinks of an eye. At the show, makers of networking gear, such as Samsung, announced products for the first 5G networks. These are expected to launch in 2018, mostly in South Korea and in Japan, where the new wireless technology is expected to be shown off during the Tokyo Olympic Games in 2020.

Much still needs to be invented to make 5G a reality. Mobile carriers will, for instance, have to rejig their networks to make them more like a “computing cloud”. The idea is that network operators, just like providers of computing power, should be able to cook up new telecoms services within seconds. One technique is called “slicing”, meaning phone networks can be divided up to serve different purposes, such as providing superfast connectivity for self-driving cars or reliably hooking up connected devices as part of the Internet of Things.

Mobile innovation is not doomed to be hidden in the network. But you will have to look more closely to spot it. In Barcelona fingerprint readers appeared in smartphones costing less than \$100. If these move to even cheaper devices, it would be a boon to people in developing countries who could easily authenticate themselves online. Another development was that 360-degree cameras are becoming smaller and cheaper. The matchbox-sized Giroptic iO, which attaches to a smartphone, costs \$260. Expect another dimension of selfies, which some already call “surroundies”, and, inevitably, new sorts of selfie sticks.

The woes of Uber’s boss

Road rage

Travis Kalanick’s bad month

“I MUST fundamentally change as a leader and grow up.” It is rare for the boss of a big technology firm to be so contrite. It is even more of a surprise to have Travis Kalanick (pictured), the chief executive of Uber, a popular ride-hailing company, go that far: he is one of the most pugnacious entrepreneurs in Silicon Valley. “This is the first time I’ve been willing to admit that I need leadership help and I intend to get it,” he added.

Mr Kalanick had little option but to grovel. On February 28th Bloomberg, a media group, released a video showing a heated discussion between him and an Uber driver, Fawzi Kamel, about the fact that the firm has lowered the rates its drivers receive. Mr Kamel told Mr Kalanick that he had lost \$97,000 and gone bankrupt because of him, at which point Mr Kalanick lost his cool: “Some people don’t like to take responsibility for their own shit.”

The video capped a terrible month for Mr Kalanick. First, more than 200,000 subscribers deleted their Uber app after the firm was accused of breaking a strike by taxi drivers protesting against Donald Trump’s executive order against refugees. Then a former employee published a blog post in which she accused Uber of refusing to discipline her manager after he had propositioned her for sex. Uber’s head of engineering resigned earlier this week after reports that he had received a sexual-harassment complaint at his previous em- ▶▶



You talking to me?

ployer (he denies the allegations).

To Mr Kalanick's credit, his reactions have been deft. He resigned from Mr Trump's business advisory council. He created a committee to look into Uber's culture. He also met with more than 100 female employees and promised: "I want to get at the people who are making this place a bad place." This week's *mea culpa*, which also included an apology to Mr Kamel, was part of an e-mail to all Uber staff sent quickly after the release of the video.

But it will take more to burnish the firm's brand. "Uber has been here many times before, responding to public exposure of bad behavior by holding an all-hands meeting, apologising and vowing to change, only to quickly return to aggressive business as usual," wrote Mitch and Fredda Kapor, two early investors in the startup, in an open letter on February 23rd.

The bad publicity comes at a time when Uber needs to deal with two bigger issues. First, regulators are making life harder for the firm. For example, the European Court of Justice, the European Union's highest court, will soon decide whether Uber is just a digital service or a transport firm. If it is judged the latter, it would have to comply with a dense rulebook.

Second, Uber, which is now operating in more than 500 cities worldwide, has to find a way to make money. It reportedly lost about \$3bn in 2016 on revenue of \$5.5bn—a whopping cash-burn rate, even though it has raised over \$1bn in capital and debt. Such numbers make it unlikely that Uber will soon follow in the footsteps of Snap, another high-profile tech startup which priced its IPO this week at a valuation of \$19.7bn. At a time when Uber could use a little goodwill, Mr Kalanick's antics do not help. ■

Samsung

Group sacrifice

SEOUL

South Korea's giant disbands its controversial strategy unit

"THE de facto dismantlement of the Samsung Group" was how South Korea's semi-official news agency, Yonhap, spun the news on February 28th that the sprawling conglomerate would scrap its Future Strategy Office, a management organisation of some 200 senior staff, and devolve power to individual affiliates as part of broad reforms. The office had become for many South Koreans a vexing symbol of Samsung's secretive goings-on.

Longtime Samsung-watchers were less impressed. The parallels with an earlier disbanding of the same office in 2008,



Latest episode of Dynasty

when it was known as the Strategy and Planning Office, were striking. Then, Lee Kun-hee, Samsung's chairman, had been indicted for his involvement in a multi-trillion-won slush-fund scandal. Then, too, the group closed down the office to show it was serious about reform. But by 2010 it was reborn as the Future Strategy Office.

Lee Kun-hee's son and presumed heir to the Samsung empire, Lee Jae-yong (pictured), is the one now behind bars. This week he was indicted by a special prosecution team on charges of bribery and embezzlement. Prosecutors have accused him of paying 43bn won (\$38m) to "cultural organisations" closely tied to Choi Soon-sil, a former confidante of South Korea's president, Park Geun-hye.

In return he allegedly received state support for an important merger in July 2015 between two Samsung affiliates. The tie-up was viewed as essential to the smooth transfer of power between the 75-year-old Mr Lee, who has been in hospital since 2014, and his son. The family controls Samsung through a complex knot of cross-shareholdings between its 26 affiliates, which operate in businesses ranging from life insurance to smartphones. The younger Mr Lee has said he provided the funds, but denies any bribery.

The Future Strategy Office had come to represent the concentration of elite power that South Koreans are so fed up with, says Lee Jong-tae (no relation to Mr Lee) of *SisalN*, a South Korean magazine. In the past, the office was said to have been vital in ensuring the family's control. It managed relations with the government to that end.

Yet even its abolition serves the Lee dynasty. It is a pacifying move to try to "save" the young chieftain, says Lee Jong-tae. Mr Lee can now seek bail, and a court must rule within three months. Still, after his arrest, says Chang Sea-jin of the National University of Singapore, Mr Lee will have "neither the legitimacy nor the size of equity stake" to maintain the emperor-style

management of his father (inheritance tax will slightly reduce the family's stake).

Perhaps. The day-to-day running of Samsung will be little affected by the dissolution of the family's most loyal body, because of the control still wielded by the Lee dynasty. Most people expect the key functions of the strategy office to be transferred to other parts of the group, most likely to three companies—Samsung c&T, Samsung Life Insurance and Samsung Electronics—in preparation for a long-anticipated transition to a more transparent holding-company structure. Shares in Samsung Electronics are trading at near record highs owing to strong results and optimism about the coming launch of the latest model of its main smartphone, the Galaxy s8.

The chief surprise this week was the mass resignation of the strategy office's nine executives, including an old guard handpicked by the elder Mr Lee. Mr Chang suspects that this "corporate cleansing" will work in the younger Mr Lee's favour. Some of the executives had become so powerful that they might have overshadowed him. The unit's closure might both save the heir and make his return easier. ■

Cargo shipping

Still at sea

Why there has been so little scrapping in an industry beset by overcapacity

TOO many new ships, too few old ones scrapped. Since the financial crisis, after which trade growth slowed, the Baltic Dry Index—a measure of bulk freight rates—has fallen by 93%. Prices for transporting containers have plunged by the same amount on some routes. In 2008 it cost \$2,000 to send a 20-foot box from China to Brazil; now it costs \$50. The industry is drowning in red ink. Hanjin Shipping of South Korea, the world's seventh-largest line, went bust last August, and even Maersk Line, which has the lowest costs in the industry, lost \$367m in 2016.

But there was some optimism this week at European Shipping Week in Brussels, an industry event. Bosses at bigger lines reckon the worst is over. Higher levels of scrapping will cut overcapacity, argues Rolf Habben Jansen, CEO of Hapag-Lloyd, a German line. The industry may break even this year, predicts Rahul Kapoor of Drewry, a consultancy.

But many shipowners are still too reluctant to send their hulks to the scrapheap. The problem can be clearly seen in the container-shipping business. Last year firms scrapped 194 ships, accounting for 3% of global tonnage—a record high. But new ►

ships will add 8% more capacity this year; the net increase is over twice the level of forecast growth in demand.

The surge in shipbuilding was originally prompted by Maersk Line's order in 2011 for 20 huge Triple-E class vessels. These ships cut Maersk's costs relative to its rivals, which retaliated with their own orders for supersize ships. At first the industry was able to mask the extra capacity by reducing sailing speeds by a third, but that ruse has reached its limit.

Executives at bigger lines hope that their own new fuel-efficient liners will push small, independent shipowners to scrap older ones. Yet these are often family businesses and have no such intention, says Basil Karatzas, an adviser to many such firms, not least because the scrap value of their ships is much less than the cost of new ones. For that, blame over-production of steel by China. The scrap value per long ton of ship fell from \$450 in 2014 to \$271 last year. Banks have preferred to restructure loans on unprofitable vessels rather than scrap them at a fraction of the value of the debt owed on them.

Breaking firms are becoming more cautious, too—particularly the beaching yards in India, Pakistan and Bangladesh that account for two-thirds of ship-scraping globally. Last year several in India got into trouble when they bought vessels during a short-lived steel-price spike and then had to sell the scrap at a big loss.

Some yard owners also complain about the cost of compliance with the Hong Kong International Convention of 2009, which sets minimum environmental and worker standards for ship recycling. Although India, Pakistan and Bangladesh have not ratified it, some facilities, such as India's Shree Ram yard in Alang, try to adhere to the convention. Others do not. Falls this year in the number of bulk carriers and tankers being sent for scrap may be bad news for the shipping industry. For the environment, there is a silver lining. ■



Scrappy don't



Business in Rwanda

Party of business

KIGALI

Crystal Ventures stifles private firms

RWANDA has a reputation for enterprise. Its government has largely stamped out small-scale corruption and trimmed regulations, making the country the second-best place in Africa to do business, according to the World Bank's widely-followed ranking. But the dominant political party, the Rwandan Patriotic Front (RPF), does more than help business: it runs its very own conglomerate.

Crystal Ventures, the RPF's holding company, has investments in everything from furniture to finance. It owns the country's biggest milk processor, its finest coffee shops and some of its priciest real estate. Its contractors are building Kigali's roads. There are several firms offering security services in Rwanda but the guards from ISCO, part of Crystal Ventures, are the only ones who tote guns. The company is reckoned to have some \$500m of assets.

Its expansion is aided by the fact that its chief rival is Horizon, a similar group that is accountable to the ministry of defence, with interests in construction and logistics. Critics argue that Crystal Ventures and Horizon both get cushy government deals which mask the failures of their enterprises, several of which are said to be loss-making. Firms like ISCO and Inyange Industries, a dairy-products and drinks firm, dominate the Rwandan market. "They monopolise but they don't deliver on development," says David Himbara, a former

presidential adviser who lives in exile.

To critics, the firm is the business wing of an authoritarian elite. It funded half of the party's election campaign in 2010. It sold a subsidiary in 2002 after UN experts accused it of trading in conflict minerals in the Congolese war. The business purpose for two private jets that are allegedly leased by Crystal Ventures to the president, Paul Kagame (pictured), is unclear.

Rwanda is not the only place in Africa where political parties run businesses. In Ethiopia the Tigrayan People's Liberation Front, said to be the richest party in Africa, invests in shoes, pharmaceuticals and much else. In Zimbabwe, party-owned firms have visibly floundered owing to unchecked corruption and mismanagement.

Some people argue, however, that political parties can direct capital towards long-term projects, nurturing a private sector in places where local capitalists are scarce and foreign ones are cautious. The RPF came to power at the end of Rwanda's genocide in 1994, a rebel army led by returning exiles. Jean-Paul Kimonyo, an adviser to Mr Kagame, the former rebel leader, says that the exiles "could not come back to Rwanda without developing the country—they would have been killed." The party used its funds to rebuild the country and increase its legitimacy. Crystal Ventures, which was originally called Tri-Star Investments, was founded in 1995.

Telecommunications was an early success. In 1998 Tri-Star partnered with MTN, a South African multinational, to establish a mobile-phone network at a time when few saw viable prospects in Rwanda. The company later listed its 20% holding in MTN-Rwanda. Crystal Ventures acts as an "ice-breaker" for the private sector, says Frederick Golooba-Mutebi, a Kigali-based researcher. If the government sat here waiting for foreign investors to come and do things for them, he adds, "the investors would probably never come." Crystal Ventures does compete for government contracts, and it and Horizon do not always win. One rival says that Chinese contractors worry him more than either firm.

That may be so. But the test is knowing when to let the private sector in, and there is little sign of that. Recent reports suggested that a majority stake in Inyange Industries had been sold to Brookside Dairy, an enterprise owned directly by the family of the Kenyan president, Uhuru Kenyatta. The reports are denied by Brookside Dairy's managers. Crystal Ventures was also expected to list some of its other companies, but has not. In the long run, creating such an extraordinary overlap between political and commercial power is dangerous. Not only does it crowd out the private sector today. But suppose that a future party leader were less honest than Mr Kagame? Crystal Ventures would then be an efficient tool for looting the country. ■

A corruption probe into Eni

Eni questions

A corruption probe raises uncertainty about the future of an oil major's boss

WHEN Eni, Italy's oil major, this week revealed a return to profit in the fourth quarter and a long-term commitment to keep the barrels flowing, there was much to cheer. Three years on from Claudio Descalzi's appointment as CEO, Eni has made spectacular oil and gas discoveries even as its peers retrenched amid the oil-price slump. Sanford C. Bernstein, a research firm, says only half in jest that it is "evolving into an actual oil company".

But a cloud hangs over the firm, which is 30% state-owned—and over Mr Descalzi (pictured) personally. He is caught up in an Italian probe into alleged corruption in a deal Eni struck in partnership with Royal Dutch Shell in Nigeria, just as he is seeking reappointment as CEO in April. The company's response to the scandal, especially its treatment of independent board members, raises questions about its commitment to good corporate governance.

In 2011, Eni and Shell jointly paid \$1.3bn for a huge offshore oil block, known as OPL 245, which has more than 9bn barrels of probable reserves. Over \$1bn of this flowed to a shell company. That firm, Malabu, was widely known to be owned by a former Nigerian oil minister, Dan Etete, who had acquired the rights to OPL 245 for a song while in office.

The companies have always insisted that their deal was with the government, not Malabu. However, it is clear that some executives knew it was a two-part affair in which they paid the government, and the government funnelled the money to Malabu. Nigeria's then attorney-general has since described the government's role as that of an "obligor" in a transaction between a unit of Shell, Eni and Malabu. In January Nigerian authorities seized the OPL 245 oil block, labelling it the "proceeds of crime". The country's anti-corruption commission alleges that Eni and Shell "conspired" to send payment as a "bribe", and is seeking charges against their local subsidiaries. They deny wrongdoing and have appealed against the seizure.

Last month, after a long investigation, Italian prosecutors led by Fabio De Pasquale, who secured the conviction of Silvio Berlusconi, Italy's former prime minister, for tax fraud, requested that five current and former Eni executives, including Mr Descalzi, face trial for corruption. Also on the charge sheet are several middlemen, Mr Etete and Eni and Shell themselves. Separate charges are being sought against



Badluck Descalzi?

four men who worked for Shell at the time, including its then head of upstream, Malcolm Brinded. A judge in Milan must now decide whether to indict the accused. The first hearing is scheduled for April 20th.

The allegations are eyebrow-raising. Prosecutors allege that over \$500m ended up in front companies for Goodluck Jonathan, Nigeria's then president, with \$466m diverted to a chain of *bureaux de change* in what might be the biggest-ever cash transaction. Mr Jonathan denies wrongdoing. A "notification" filed by prosecutors also describes "retrocessions" (ie, kickbacks) allegedly received by Eni and Shell executives, including a \$50m cash delivery to one Eni executive's home in Abuja.

The accused all deny wrongdoing. Eni's board has expressed "total confidence" that the firm and Mr Descalzi are innocent. After drawing on the prosecutors' full dossier, an American law firm commissioned by Eni has found "no evidence of corrupt conduct", the company says. A Shell spokesman says: "We don't believe a request for indictment is justified and we are confident that this will be determined in the next stages of the proceedings."

Despite the allegations, Eni continues to attract "buy" recommendations from many analysts who would like to see Mr Descalzi reappointed. There has, however,

been disquiet over Eni's treatment of board members who ask difficult questions. Some investors expressed dismay when Luigi Zingales, an independent director, left the board in 2015, citing "irreconcilable differences of opinion", apparently over how the company tackled corruption risks. Mr Zingales, a professor at Chicago's Booth School of Business, had joined the board hopeful that he could help change things. He left disillusioned.

More worrying still is the treatment of Karina Litvack, another non-executive director with strong governance credentials—and a tendency to ask tough questions about alleged graft. Last year she was removed from a board control-and-risk committee that has access to OPL 245 case files. The reason, Eni said, was that Ms Litvack had a possible conflict of interest, because she has been implicated in a case of alleged defamation against the company. But that case is full of oddities. The defamation is supposed to be against Eni and Mr Descalzi, but it is not clear who the allegations came from (Eni says it was not from the company). Intriguingly, Eni wants the defamation case file to be admitted as evidence in the main OPL 245 case, despite not having seen its contents.

To many outsiders, the episode looks trumped-up. One investor says the defamation case appears to be a "brazen attempt to silence board critics". Eni denies this. Another notes that it smacks of double standards for Eni to allow executives accused of corruption to stay in their jobs while insisting that a director ensnared in a vague defamation case relinquish a role.

Stephen Davis of the International Corporate Governance Network, an investor-led organisation, sees the case as "a test of the responsiveness of Italian public companies to a changing world". He notes that Italy's *voto di lista* mechanism, which guarantees minority investors the right to nominate directors and to communicate with the board, gives shareholders a voice they don't have in, say, America—in theory at least. Investors say that Eni's chairman, Emma Marcegaglia, has listened to some of their concerns. Minority investors plan to renominate Ms Litvack to the board in coming weeks (as one of three they are entitled to put on the slate). But whether she will be reinstated to the control-and-risk committee remains to be seen.

The cloud of alleged corruption will hang over Eni for some time. The judge who must decide whether to send the suspects to trial in the main case may not make the decision until the end of the year. The good news is that since the OPL 245 deal, new rules in Europe have forced public companies like Eni and Shell to disclose payments in such transactions. The bad news is that in America, Republicans have repealed a rule requiring listed companies to do likewise. ■

Schumpeter | The British experiment

The world's most open market for takeovers is having second thoughts



ONE question prompted by Kraft Heinz's failed \$160bn bid for Unilever is whether Britain still wants to be the world's entrepot for buying and selling companies. For decades it has been more open to mergers and acquisitions than any other big economy. Britain accounts for 3% of global GDP and its firms make up just 5% of global market capitalisation, but the latter have been involved in a quarter of cross-border M&A activity since 1997, either as buyers or as targets, according to Dealogic, a data firm.

Now Blighty is getting cold feet. The government frowned on the Kraft bid, aware, probably, of the dwindling number of large British firms that are left. Another proposed deal, the \$11bn takeover of the London Stock Exchange by Deutsche Börse, its German rival, is on the rocks, partly because of the British firm's insistence that the headquarters be in London, not Frankfurt.

Brexiters promise that Britain is on the verge of a new, golden age of global commerce. But many of its captains of industry fret that its past wide-open policy on takeovers means that it now has too few big firms to hold its own. To understand the country's predicament, go back to the early 1980s. The legacy of empire left Britain as the world's second-most-powerful force in multinational business, with 14% of the global stock of foreign direct investment. But that figure masked deep weakness. Many supposedly global firms were crusty colonial relics; at home British industry was decaying. Margaret Thatcher's medicine was a strong dose of competition, by means of privatisation, takeovers, an influx of foreign capital and managers, and plenty of deregulation. These policies have been in place ever since.

The market for corporate control was a concern secondary to Mrs Thatcher's main goals of helping consumers and boosting productivity, but the general plan was for it to work like free trade. So UK PLC would get bigger where it had a comparative advantage and retreat where it was weak. A wave of foreign takeovers followed: since 1997, over 50 firms that would today qualify for the FTSE-100 index of big firms have been snapped up by foreign rivals. Until a decade ago, comparative advantage seemed to work. In the spirits business, for example, a puny firm, Allied Domecq, was bought, and a strong one, Diageo, expanded abroad. Britain's inefficient carmakers were shut down or bought, but two pharma firms, GSK and AstraZeneca, became global players.

After 2007, however, things became lopsided. Britain's share of the stock of multinational investment fell (it is 6% today). In eight of the past ten years, there has been an M&A deficit, with foreigners laying out more on buying British firms than British firms spent on M&A abroad. By Schumpeter's estimate, a quarter of Britain's biggest firms are viewed as potential takeover candidates, including AstraZeneca and BP, an oil major. The earnings of British firms abroad have dropped by two-fifths, according to the Office for National Statistics. In the past 12 months, for the first time on record, they were less than the profits made by foreign-owned firms in Britain. In 1997, Britain had 11 firms big enough to be among the largest 100 companies by market value in the world, and that was still the case in 2007. Today it has only five in this select group.

Corporate Britain's decade of pain is partly caused by its skew towards banking, oil and commodities and emerging markets, which have all had a difficult time. But too many foreign takeovers by British firms have flopped. About a quarter of all such activity since 1997 was orchestrated either by Vodafone or by Royal Bank of Scotland, both poor dealmakers. A gaping current-account deficit is also part of the explanation. To finance the gap Britain must either borrow or sell assets to foreigners, including luxury flats in Mayfair, pedigree stallions—and big companies.

One possible response to all this is indifference. British multinationals' poor return on capital abroad—4% in 2016—means it may make sense for savers to invest elsewhere. Many foreign takeovers have been excellent for Britain. Jaguar Land Rover, a carmaker, revived after it was bought by India's Tata Group. Nonetheless, having a critical mass of global firms matters. American multinationals deploy three-quarters of their capital investment and 84% of their research-and-development spending at home. Having a cohort of global firms based in Britain cements London's role as a business hub. And the analogy with free trade, which would suggest that resources swiftly get reallocated from big dying firms to fast-growing ones, is not straightforward when applied to the market for corporate control. There is a finite stock of big global companies that is hard to replace. Britain probably could not create a new drugs giant if AstraZeneca were bought.

Blocking all over the world

Britain tweaked its takeover code in 2011, giving bidders less time to try and win their prize. The results have been mixed. Pfizer, an American pharma firm, failed to buy AstraZeneca in 2014. On the other hand AB Inbev, a beer firm backed by the same investors as Kraft Heinz, bought SABMiller, a British-listed firm, in 2016. After the bid for Unilever a further tightening of the rules is likely.

One option would be to mimic France, which gave extra voting rights to what it judged to be long-term shareholders in 2015. Yet that would never wash with Britain's institutional investors, who are keen on the "one-share-one-vote" principle. As part of its proposed industrial strategy, the government may instead label more sectors as strategic and block takeovers in these altogether.

Even the free-market wing of the ruling Conservative Party is on board: John Redwood, one of the architects of privatisation in the 1980s, backs a change. For deals that are permitted, the government may impose conditions on bidders. When SoftBank, a Japanese firm, bought ARM, a chipmaker, for \$30bn in 2016, it had to agree to run ARM as a separate business based in Cambridge, where it will do research. Britain's 30-year experiment with a free market for takeovers is quietly coming to an end. ■



India's economy

Off balance

MUMBAI

Can India continue to grow if both its banks and companies are ailing?

IF INDIA is indeed the world's fastest-growing big economy, as its government once again claimed this week, no one told its bankers and business leaders. In a nation of 1.3bn steadily growing at around 7% a year, the mood in corner offices ought to be jubilant. Instead, firms are busy cutting back investment as if mired in recession. Bank lending to industry, growth in which once reached 30% a year, is shrinking for the first time in over two decades (see chart). If this is world-beating growth, what might a slowdown look like?

India's macroeconomy chugs along (though the quality of government statistics remains questionable), but its corporate sector is ailing. The sudden and chaotic "demonetisation" of 86% of bank notes in November hardly helped. But the origins of India's troubles go much deeper. After India dodged the worst of the financial crisis a decade ago, a flurry of investment was made on over-optimistic assumptions. Banks have been in denial about the ability of some of their near-bankrupt borrowers to repay them. The result is that the balance-sheets of both banks and much of the corporate sector are in parlous states.

After years of burying their heads in the sand, India's authorities now worry that its "twin balance-sheet" problem will soon imperil the wider economy. Both the Reserve Bank of India (RBI) and the government have nagged banks to deal with their

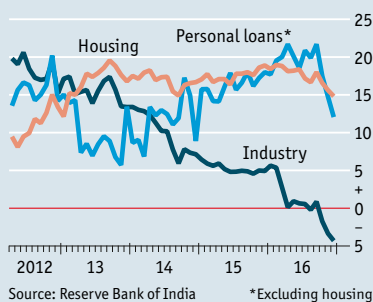
festered bad loans. Around \$191bn-worth, or 16.6% of the entire banking system, is now "non-performing", according to economists at Yes Bank. That number is still swelling.

Given the linkages between them, companies and banks often run into trouble concurrently. But countries where banks' balance-sheets resemble Swiss cheese usually have no choice but to deal with the issue promptly, lest a panicked public start queuing up at ATMs. India is different. State-owned lenders make up around 70% of the system, and nobody thinks the government will let them go bust. As a result, what for most economies would be an acute crisis is in India a chronic malaise.

That doesn't make it any less painful. In-

Not what a boom looks like

India, bank credit
% change on a year earlier



Also in this section

58 Buttonwood: Money illusion

59 The LSE and Deutsche Börse

59 American trade policy

60 Currency manipulation

61 Moral hazard

61 Private equity under pressure

62 Free exchange: Kenneth Arrow

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vestment is a key component of GDP, and it is now shrinking, thanks to parsimonious firms. India runs a trade deficit and the government is seeking to cut its budget shortfall, which leaves consumption as the sole engine of economic growth. Indeed, until demonetisation, consumer credit was booming, up by about 20% year on year. Some may wonder whether those are tomorrow's bad loans, or when consumers will run out of stuff to buy.

Meanwhile, banks' profits are sagging, even without the impact of fully accounting for dud loans. State-owned lenders collectively are making negative returns. Thirteen of them are described in a recent finance-ministry report as "severely stressed". Demonetisation did indeed bring in lots of fresh deposits, but the bankers were then browbeaten into slashing the rates at which they lend, further denting their margins.

The dearth of investment is in part due to a lack of animal spirits. Sales outside the oil and metals sector are up by a mere 5% year on year, compared with nearer 25% at the start of the decade. Capacity utilisation, at 72.4%, is low by historical standards: even if money were available, it is not clear many would want to borrow.

Bankers, companies and policymakers once hoped the twin balance-sheet problem would eventually solve itself. Everyone's incentive has been to look away and hope economic growth cures all ills. It has not: profits are in fact shrinking at the large borrowers, many of them in the infrastructure, mining, power and telecoms sectors. But banks have cut credit across the board, including to small businesses.

Fixing this is not easy. Much of the hard work repairing corporate balance-sheets needs to be done by public-sector bank bosses, who should (yet seldom do) restructure and partly forgive loans. Many of ►

► them inherited the problems. Most defaulting tycoons are politically connected, which is how some got the loan to start with. Accepting that they cannot pay it back, and waiving part of the debt, might be seen as abetting crony capitalists. This can attract the attention of the many zealous agencies probing public spending.

So it is far easier for a banker to make no decision—which often means having to extend further loans to keep the borrower afloat—and pretend all is well. It hardly helps that one former bank boss is languishing in jail while authorities probe a loan to Kingfisher Airlines, whose former

boss is skulking in a mansion in Britain.

Writing off loans would be easier if banks could foreclose on companies, and take equity in them instead. Many potential investors are eager to work with banks to recapitalise good companies with bad balance-sheets. But without a proper bankruptcy code, which is only now coming into force and will take years to become effective, that is a fool's errand.

If banks help fix corporate balance-sheets, the large resulting losses will highlight how weak their own capital positions are. The government has promised to inject more money in the banks, but has put

in only a small fraction of the \$90bn Fitch, a ratings agency, argues they need to get onto an even keel. Nor will it countenance having less than a majority stake in the state-owned banks, limiting their ability to raise funds from private investors.

One way to break the logjam would be to set up a “bad bank” that would take the dodgiest loans off banks' balance-sheets, leaving them free to focus on making new loans. Viral Acharya, a new deputy governor at the RBI, recently proposed ways to facilitate the transfer of non-performing loans off banks' balance-sheets—essentially, giving cover to bankers who cut sensible ►►

Buttonwood | Money illusion

Prospective investment returns have probably fallen, but not everyone has adjusted

IF THERE is one aspect of the current era sure to obsess the financial historians of tomorrow, it is the unprecedentedly low level of interest rates. Never before have deposit rates or bond yields been so depressed in nominal terms, with some governments even able to borrow at negative rates. It is taking a long time for investors to adjust their assumptions accordingly.

Real interest rates (ie, allowing for inflation) are also low. As measured by inflation-linked bonds, they are around -1% in big rich economies. In their latest annual report for Credit Suisse on global investment returns, Elroy Dimson of Cambridge University and Paul Marsh and Mike Staunton of the London Business School look at the relationship between real interest rates and future investment returns. Very low real rates have in the past been associated with poor future equity returns (see chart).

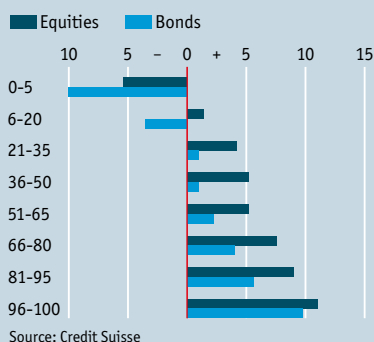
That may come as a nasty shock for state and local-government pension funds in America. They have to assume a future rate of return on their investments when calculating how much they need to contribute to their plans each year. Most opt for 7-8%, a level that has prevailed for years. That return looks highly implausible at a time when ten-year Treasury bonds yield just 2.4%.

There is a strong incentive not to change these assumptions. CalPERS, a Californian state pension fund, has cut its assumed return from 7.5% to 7%. But even that small shift will cost the state \$2bn a year in extra contributions.

Why should low real rates and low returns be linked? One reason is that very low real rates are associated with times of economic difficulty, and thus periods when corporate profits are under threat. But a low real interest rate also means a low cost of capital for companies, which

Real problem

Real rate of return, % per year over next five years
By percentiles of real interest rates across 21 countries since 1900



ought to be good news. Indeed, central banks ease monetary policy to try to drive down interest rates, and thus encourage business investment.

There has been some recovery in business investment since the last recession. But that recovery has not been as robust as might have been expected, given the low cost of capital. In a recent speech, Sir Jon Cunliffe, deputy governor of the Bank of England, noted that “in the 40 years to 2007, business-investment growth averaged 3% a year. In the eight years since the crisis it has averaged 1.5% annually.”

A number of possibilities could explain this decline, including a lack of access to finance. Banks have been boosting their capital ratios in recent years and have been more reluctant to lend. But another factor relates to the “hurdle rate” companies use before they decide whether to invest. A survey by the Bank of England indicates that firms are still using a hurdle rate of 12%, around the average of the rate of return on investment they have achieved in the past.

In other words, despite the big fall in the

cost of borrowing since the crisis, the hurdle rate has not come down. Since the risk-free rate is in effect zero, the bank says British firms are now looking for a 12-percentage-point margin compared with one of seven points before the crisis. This could be a version of “money illusion”, when people fail to adjust their expectations for nominal returns as inflation declines (in this case, both real and nominal expectations ought to have fallen).

There is an alternative explanation for the failure of expectations to shift. Both businesses and investors, realising that the economic outlook is uncertain, may be demanding a higher risk premium for starting new projects or buying shares. That explanation is a little hard to square, however, with the repeated new record highs being scaled by stockmarkets or with the high valuations afforded to American equities.

Since the market low in March 2009, dividends have risen by 48% in real terms and real share prices have risen by 167%, according to Robert Shiller of Yale University. The cyclically-adjusted price-earnings ratio (or CAPE), which averages profits over ten years, is 28.7, its highest level since April 2002. In the past, very high CAPEs have been associated with low future returns.

Indeed, having analysed the data, Messrs Dimson, Marsh and Staunton reckon global investors are expecting a risk premium of 3-3.5% relative to Treasury bills—a level that is lower, not higher, than the historic average. So something does not add up. American pension funds are optimistic. Businesses are cautious. Shares are trading on very high valuations. Not all these assumptions can be proved right.

► deals. The government's chief economic adviser, Arvind Subramanian, has suggested a bad bank run by the private sector.

Problematic as it is, at least the Indian banking sector is relatively small compared with the size of the overall economy, and its bad debts are concentrated. A database put together by Ashish Gupta at Credit Suisse, a bank, shows that over \$100bn of the dud loans lie with just ten borrowers. That should simplify the co-ordination of any deal, even if the loans are spread across many banks.

However, the crucial element in deciding who bears the losses—setting the price at which the bad bank would buy the assets—is fiendishly difficult. What price a loan secured against a half-built bridge in Gujarat? Lots of people would have to make decisions they have expertly dodged for years. Worse, federal elections are due in 2019, and setting up bad banks takes time. Bailing out banks and tycoons would not play well at the polls. The temptation will be to give it more time—and pay a yet higher bill later. ■

The LSE and Deutsche Börse

No deal?

An Anglo-German merger is close to collapse, again

IT HAD been billed as a bridge between Europe's two main financial hubs. It has become, however, a symbol of their growing competition—and of the uncertainty into which Brexit has plunged the EU's markets. A planned merger between Deutsche Börse (DB) and the London Stock Exchange (LSE), both listed companies, seems on the verge of collapse. This week the LSE rejected the latest demand of the European Commission (EC) to sell parts of its business to allay competition concerns.

The €29bn (\$30bn) merger was first announced a year ago and is the companies' third attempt to join forces since 2000. It brings together the operators of the British, German and Italian stock exchanges, as well as some of the largest clearing-houses in Europe. Before it would approve the deal, the EC launched an investigation into its impact on competition. Last September it identified a number of concerns, including about the derivatives market once the clearing-houses merged. In early February the LSE sought to ease that concern by confirming the sale of its Paris-based clearing unit, LCH.

Not good enough, the EC countered a few weeks later: the sale of LCH would not boost competition, because the LSE also owned MTS, an Italian electronic-trading

platform for bond and repo markets, which could direct trades away from LCH and towards other clearing-houses in the new, merged company. So the commission in the LSE's words "unexpectedly" made a "disproportionate" demand: that MTS also be sold off. The LSE refuses. The EC is due to make a decision on the deal by April 3rd; unless it changes its position, the merger seems doomed.

The latest roadblock may appear to be about competition. But politics lurks close to the surface. National pride is at stake: DB and the LSE operate stock exchanges regarded as iconic institutions in Germany and Britain. The vote in Britain to leave the EU has raised the stakes. Under the terms of the deal, agreed on before the referendum and since approved by shareholders, the merged company's headquarters would be in London. But now that Britain is leaving the EU, the German state of Hesse argues there is a clear case for moving them to DB's home city, Frankfurt.

Inevitably, this has prompted suspicions that the EC has been put under pressure to be tough on the LSE, either by the Germans, or even by the French, who may want to thwart the rise of Frankfurt as a post-Brexit alternative to London. It has not helped that Carsten Kengeter, DB's chief executive and the intended boss of the merged concern, lives in London and is seen as an Anglophile, or that German prosecutors are investigating allegations of his insider dealing before the proposed merger was made public—a charge both he and DB's supervisory board dismiss.

The British government has been relatively quiet about the deal. Some politicians nonetheless express concern that the merged company's headquarters might move to Germany, taking euro-denominated clearing with them. But, argue supporters of the deal, relocation would not



Always the bridesmaid

be so easy: a 75% majority of the new company's board would need to approve it. Since the separate entities within the merged company would continue to be supervised by national authorities, any future move would need regulatory approval. And in any case, the fate of euro-denominated clearing could well be determined not by the companies but by regulators and the Brexit negotiations.

The LSE says it remains convinced of the benefits of the merger. But it seems to accept that the deal is destined to collapse. Even if the EC hurdle is cleared, others loom. Supervisors in both Hesse and Britain are yet to bless the union. The LSE says it can stand on its own. Its share price fell only a little on news of the merger's troubles. It was perhaps buoyed by the prospect of a rival suitor. The American-owned Intercontinental Exchange may be waiting in the wings; it expressed interest last year, and the fall in sterling since makes the LSE a cheaper buy. Bridges across the channel are hardly in vogue in Britain these days. The Atlantic, anyone? ■

American trade policy

Plan of action

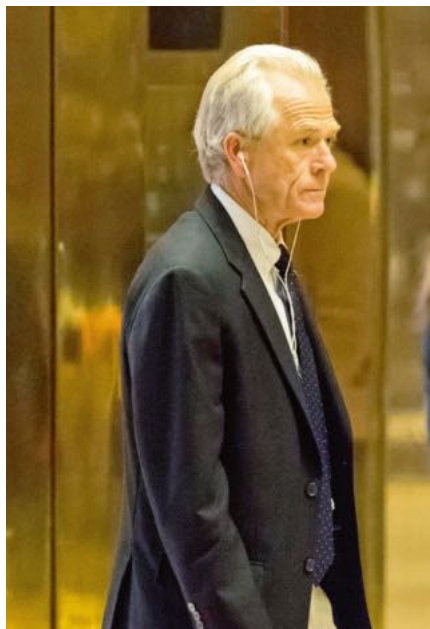
WASHINGTON, DC

The Trump administration's trade strategy is dangerously outdated

ON THE campaign trail, Donald Trump's trade policy was an alarming mixture of coruscating complaints and fierce threats of protectionist retaliation. But the world has been in the dark about how much of this rhetoric his administration might turn into reality. A flicker of light came on March 1st as the administration's trade-strategy document was presented to Congress. Washington wonks see the hand of Peter Navarro, Mr Trump's trade adviser and author of a book (and film) called "Death by China". Robert Lighthizer, the nominee for the United States Trade Representative (USTR), has not yet been confirmed.

Little is new in the document's promises of "new and better trade deals" or of strict enforcement of American trade laws. But a preference for bilateral trade deals over multilateral ones is a change of tack. And the tone is certainly confrontational: "It is time for a more aggressive approach." The document also gives an indication of how a Trump administration might take a trade fight to China: by using sections 201 and 301 of the Trade Act of 1974.

The first weapon, section 201, allows tariffs to be imposed as a safeguard to protect American producers from a surge of imports. Affected companies must show that ►



The trade guns of Navarro

▶ they have suffered “serious injury”, but need not prove any unfair practice by the foreign firms.

Mr Trump’s trade team may be reliving the experience of the Reagan administration, which in 1983 slapped an extra 45% tariff on imports of motorcycles in response to a petition from Harley-Davidson, an American manufacturer. Mr Trump has referred to this as having had a “big impact”. But as a trade-enforcement tool, section 201 has drawbacks. Proving a case can be tricky, since there is a high legal threshold for proving injury and the adjudicator, the International Trade Commission, is an agency respected for its independence. (The Department of Commerce, which makes rulings on anti-dumping, is seen as a softer touch.) Moreover, indiscriminate use of the provision will provoke other countries into retaliation. In 2002 America tried to slap tariffs of 30% on steel in violation of the World Trade Organisation’s (WTO) rules, but was forced to retract when faced with the threat of \$2.2bn-worth of tit-for-tat tariffs on exports ranging from sunglasses to orange juice.

The second weapon in the arsenal, section 301, is “scarier” than 201, says Kim Elliott, a trade expert. “The grounds for taking action are less well-defined.” It allows the administration to take action against “unfair” trade practices. America used to invoke this section to hit its trade opponents before disputes could be dealt with by the General Agreement on Tariffs and Trade, the WTO’s precursor.

Since the establishment of the WTO in 1995, the section has fallen into disuse, on the understanding that it could be implemented if a WTO ruling went in America’s favour and authorised tariffs on a trading partner that was breaking the rules. The

fear, however, is that this week’s mention of section 301 implies the Trump administration might start going outside the global rules of the WTO system. Intensifying the alarm is that an entire section of the strategy document focuses on defending American “national sovereignty over trade policy”. It also emphasises that a WTO ruling against America need not automatically lead to a change in American law or practice.

The document complains about the weakness of WTO rules. The implicit target is China. In one of the most important of several disputes which are currently working their way through the WTO courts, China challenges America’s refusal to treat it as a “market economy”. If the WTO granted China “market-economy status”, it could limit the level of WTO-compliant tariffs America could impose on its exports.

The echoes of the Reagan glory days seem to ignore how much the world has changed since the 1980s. Then the main object of America’s trading ire was Japan, an ally, which was both far smaller and often loth to retaliate when hit with trade measures. China is bigger and happier to fight back. For all its flaws, the WTO may be the best defence against an all-out trade war. In the words of Carla Hills, a USTR in the early 1990s: “without the WTO it would be the law of the jungle.” ■

Currency manipulation

Biting at the champs?

SHANGHAI

By America’s own rules, China is not a currency cheat

SINCE his election as president, Donald Trump has not softened his criticism of China over its alleged meddling to control the value of its currency, the yuan. On the contrary, he has called China “the grand champion” of currency manipulators. The kindest interpretation of this is that Mr Trump is out of date, as his own government could tell him.

America’s Treasury makes a six-monthly assessment of the foreign-exchange policies of its big trading partners. The criteria it uses to identify currency manipulators are regarded by many economists as inadequate. They do not include, for example, the domestic purchasing power of a currency. Nevertheless, even by those flawed criteria, China is far from the champion. Indeed it seems to have quit the tournament altogether.

The Treasury uses three measures: whether the country runs a sizeable surplus in trade with America; whether its current-account surplus exceeds 3% of

GDP; and whether it spends more than 2% a year to buy foreign assets to suppress the value of its currency. Over the past year, no country has checked all three boxes. China, in the latest report, only met one condition (running a big bilateral surplus in its trade with America).

The Treasury does not publish a league table of its trading partners. If it did, it would illustrate just how slippery the idea of currency manipulation is. *The Economist* has used the measures to develop a crude scoring system, to establish which countries would be in Mr Trump’s firing line if his government’s measures were applied consistently (see chart).

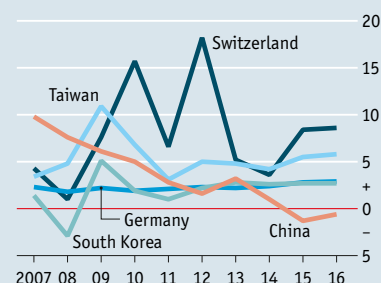
Using the current-account metric, we award one “manipulation point” to countries with surpluses at the 3% threshold, two points to economies with surpluses at 6% of GDP, and so on. Similarly, we award one manipulation point for each 2% of GDP spent buying foreign assets to depress the value of its currency. We do not include bilateral trade with America in the scoring: the value of currencies affects trade globally, and some countries such as Mexico run hefty trade surpluses against America but have deficits with the rest of the world.

Awkwardly for America, two of its friends in Asia have recently scored more highly than China: South Korea and, most clearly, Taiwan. But the highest score of all goes to Switzerland, by dint of its whopping current-account surplus and its hefty foreign-currency purchases. This illustrates one of the method’s flaws: in terms of the goods and services that it can actually buy, the Swiss franc is in fact among the world’s most overvalued currencies.

As for China itself, it has been fighting to prop up the yuan in the face of capital outflows, and its score is in fact negative: it has, in other words, raised the price of its currency, not lowered it. Over the past decade, the scoring system shows that China has done progressively less to distort the yuan’s value. That is reflected in the International Monetary Fund’s verdict that the currency is “no longer undervalued”. Or, as Mr Trump might put it: Loser! ■

Exchange controls

Currency-manipulation score*
Selected countries, higher score=more manipulation



Source:
The Economist

*Based on current-account balances and foreign-asset purchases relative to GDP

Moral hazard

Taken for a ride

Taxi drivers overcharge when passengers are on expenses

MORAL hazard is a problem that crops up often in economics. People behave differently if they do not face the full costs or risks of their actions: deposit insurance makes customers less careful about picking their bank, for example.

Moral hazard can also be second-hand. Take medicine. A patient with private insurance may be happy to sit through extra tests, and a doctor may be happy to order them. Doctors might be more reluctant to order tests if they know that the patient would bear the full cost.

A newly published paper* sets out to test this secondary problem by examining a common-enough situation—taking a taxi ride in a strange city. The authors, a trio of academics at the University of Innsbruck, sent researchers on 400 taxi rides, covering 11 different routes, in Athens, Greece. In all cases, the researchers indicated they were not familiar with the city. But in half the cases, the researchers indicated that their employers would be reimbursing them for the journey. The researchers in the latter group were 17% more likely to be overcharged for their trip and paid a fare that was, on average, 7% higher.

The most common form of overcharging was not, as might be expected, taking a longer route. People on expenses may not mind about a ride's cost but they do care how long it takes. So they were subject to bogus surcharges (a fee for



airport pickup, for example), or charged the night-time fare in the daytime.

Another finding was that taxi drivers treat the sexes differently. Women were overcharged more often than men—and whether or not the driver knew they were travelling on expenses (the difference between the extent of overcharging was not statistically significant). Drivers may be tempted to overcharge, the authors believe, because members of the higher-fare sex are less likely to complain.

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* "Second-Degree Moral Hazard in a Real-World Credence Goods Market" by Loukas Balafoutas, Rudolf Kerschbamer and Matthias Sutter, *The Economic Journal*, February 2017

Phalippou of Said Business School at the University of Oxford, private-equity firms, which aim to achieve a high level of returns on their investments over an ownership period of four to five years, often struggle to make the numbers add up. Corporate acquirers have both longer time horizons and the opportunity to extract savings from "synergies", ie, by streamlining and combining overlapping functions.

The private-equity industry has not lost its panache, however. It is finding novel ways to compete. One is to structure deals so as to profit from some of those same synergies. In March 2016, for instance, G1 Partners, a private-equity firm, teamed up with Allscripts Healthcare Solutions, a health-care technology firm, to buy one of Allscripts' rivals, Netsmart Technologies.

Another is to compete less on price and more on other parameters, such as speed. Some private-equity firms have set up dedicated teams of analysts, bankers and consultants at ever-earlier stages of a prospective deal. Indeed, according to Graham Elton, head of European private equity at Bain, many now go so far as to maintain full-blown "shadow portfolios" of companies they like, drawing up detailed business plans long before they ever come up for sale so they are ready to pounce.

One result is that some deals are never opened up to an auction. Mr Elton says there usually still is one, but that it is used mainly to extract better terms from an initial bidder. It still offers an opening for other interested parties, of course, but for these new entrants to stand a chance, they must move even more quickly.

In a deal announced on February 21st, CVC, a large European private-equity house, reportedly scooped the acquisition of Zabka, a Polish convenience store chain, from under the nose of TPG, an American private-equity shop. They put the financing together and clinched the deal in a matter of hours. Indeed, in recent months, several deals in Europe and America have closed within days or hours, rather than weeks. In private equity nowadays, it seems, what counts is less the depth of your pockets than speed on your feet. ■

Private-equity deals

Poised to pounce

NEW YORK

A shortage of choices leads to cut-throat competition

TIME was, the private-equity industry felt spoiled for choice. The difficulty was choosing deals, not finding them. Yet according to numbers from Dealogic, a data provider, that have been crunched by Bain & Company, a consultancy, private-equity houses are now losing out in mergers and acquisitions (M&A) to non-financial companies. In 2016 private equity's global share of all deals dipped to 4.2%, the lowest level since the depths of the post-crisis recession in 2009. This was down from 5.4% as recently as 2014 and an all-time high of 7.9% in 2006. The same trend is evident in Europe and in America, private

equity's two biggest markets (see chart).

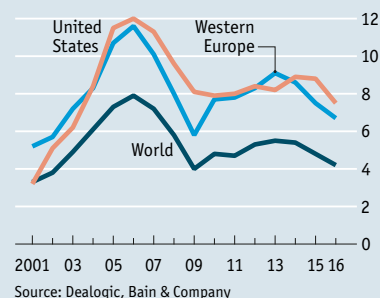
Yet the pressure on private-equity firms to deploy their capital has never been greater. The industry has raised well over \$500bn from investors in each of the past four years, the longest such streak ever. The amount of uninvested cash they are sitting on ("dry powder") reached a record \$1.47trn at the end of 2016. Of that, \$534bn was specifically earmarked for buy-outs. Investors, who pay fees as a percentage of the capital they have committed, even when it is still uninvested, are impatient for results. Why have funds held back?

One explanation is that corporations make tough competitors. They have even greater means at their disposal: American firms alone are sitting on a cash pile of nearly \$1.8trn. All that dry powder looks rather modest in comparison. But perhaps the most important factor is how highly deals are priced at the moment: a median of 9.2 times earnings globally, and 10.9 times in America, the highest since 2007.

In such circumstances, says Ludovic

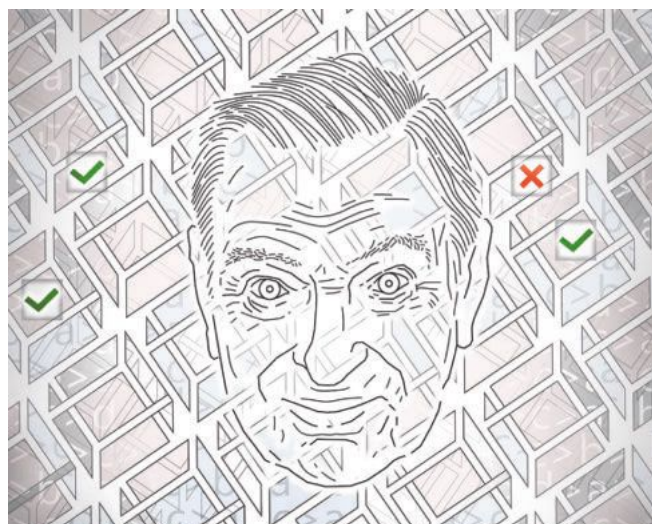
More money than deals

Number of private-equity buy-out deals
As % of total M&A deals



Free exchange | An impossible mind

For a man keenly aware of his intellectual limits, Kenneth Arrow had few



SOME great economists are Aristotelians, discerning the logic of markets from tangible examples around them. Others are Platonists, using their powers of reasoning to grasp ideal economic forms, of which actually existing markets are but flickering shadows. Kenneth Arrow, who died on February 21st aged 95, was both. His ideas gave economics some of its most compelling abstractions and most fruitful applications.

The abstractions won him the Nobel prize at the age of 51. (He remains the youngest winner and the most cited by others in their prize lectures.) He established the conditions under which prices might successfully co-ordinate production and exchange, eliminating shortages and surpluses. Adam Smith provided the best metaphor for this underappreciated feat: the “invisible hand”, guiding resources to their best uses. Ken Arrow and his co-author, Gérard Debreu, provided the best algebra.

To economists versed in mathematics, a well co-ordinated economy is like a system of simultaneous equations, which all hold true at the same time. The solution to these equations is a set of prices that equates demand and supply for scarce commodities in every market, including the market for labour and capital. Earlier economists had breezily assumed that such a solution existed, making their case with “cheerful prose and appeals to common sense”, as E. Roy Weintraub of Duke University has put it. Mr Arrow and Mr Debreu spelled out precisely when that good cheer was justified.

Mr Arrow showed similar rigour in exploring one alternative to market co-ordination: collective decision-making. A colleague studying America’s strategic contest with the Soviet Union had asked him whether it was safe to treat an entire country as an individual “player”, with coherent preferences. What was required, Mr Arrow knew, was a robust, reasonable rule to translate the preferences of Americans, say, into the preferences of America. But to his surprise, he discovered that such a rule was “impossible” to find. “Most systems are not going to work badly all of the time,” he said. “All I proved is that all can work badly at times.”

Together, these two achievements showed when markets could work, and why collective decision-making could fail. Given these intellectual preoccupations, you might assume Mr Arrow was a man of the right. But the opposite was the case.

Born in New York in 1921, he remembered the “gasping struggles” of relatives during the Depression. He was struck by the paradoxical coexistence of unmet needs and unused resources, a simultaneous equation that prices failed to solve. The son of Jewish immigrants from Romania (his last name and “olive complexion” led an acquaintance to assume he was native American), he attended City University of New York, “the Harvard of the Proletariat”. Unlike many of his peers, he rejected Marxism early (put off by the horrors of Stalin’s 1930s show trials—as well as the inadequacies of the labour theory of value), but socialism rather late.

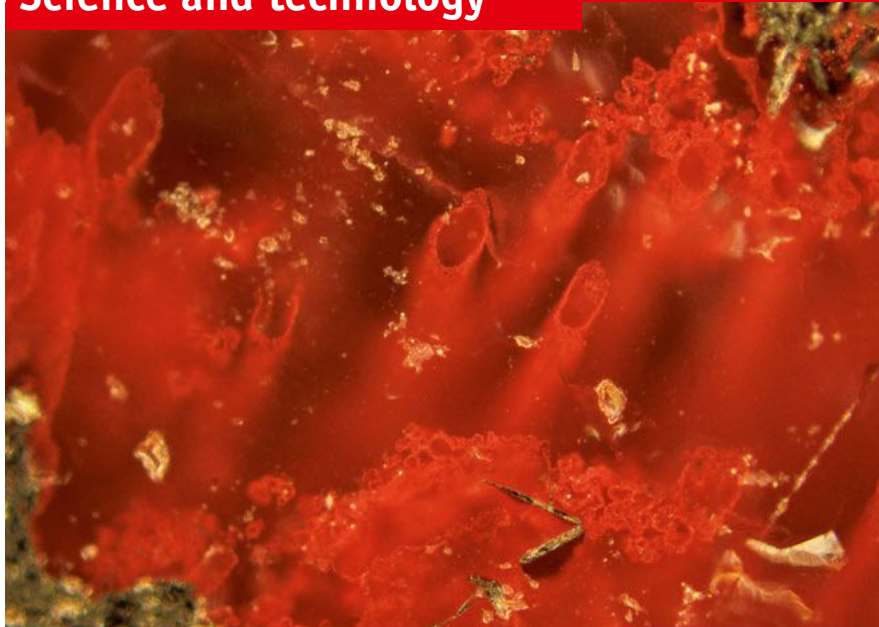
Precisely because he knew the conditions required for markets to work, he understood the ways they could fall short. In economics, the future impinges on the present; what might happen has an effect on what does. So to co-ordinate the economy seamlessly, markets need an impossible reach: they must price all the goods on offer today, all that will be on offer in the future, and all that might be on offer, if contingencies arise. In the absence of full insurance and futures markets, the state could do more to share risks and co-ordinate investments, he suggested in 1978. In fact, the state retreated in the decades that followed and markets expanded, creating derivatives partly inspired by his work.

A different market failure became clear when he trained as an actuary: buyers of insurance often know more about their condition and behaviour than the seller. To cover its risks, an insurer might raise premiums, but that will only drive away the safest customers, leaving an “adverse selection” of the riskiest buyers. These insights helped him write one of the founding articles of health economics in 1963. They also help explain why the Obamacare mandate is so hard to replace in 2017.

Fortunately for economics, Mr Arrow abandoned a career as an actuary, because there was “no music in it”. He was, famously, a polymath, steeped in philosophy and literature, who once held his own at a dinner party with a scholar of Chinese art. He spent a decade at Harvard, which he chose over MIT because of its strength in the humanities, and the bulk of his career at Stanford University in California, where “we plan and build on ground that may open beneath us”. Like his brother-in-law, Paul Samuelson (whom he once compared to Humphrey Chimpden Enderwick, the protagonist of James Joyce’s “Finnegan’s Wake”), he popped up in different places and guises, offering insights into prediction markets, learning-by-doing, antimalarial drugs, discrimination between the races, equality between the generations, petrol-price controls, arms reduction, advertising, public investment, the “carrying capacity” of the Earth and the cost-effectiveness of airframes.

Systematically agnostic

Whatever his political sympathies, he never had the certitude required for activism. He once called himself an “agnostic” in his beliefs, if a “systematiser” in his talents. Keenly aware that not everything could be known, he wanted what could be grasped to be known as systematically as possible. He summed up his vision in the words of the mathematician Hermann Weyl: “If the transcendental is accessible to us only through the medium of images and symbols, let the symbols at least be as distinct and unambiguous as mathematics will permit.” Or to put it in his terms, we should plan and build as solidly as we can, even if the intellectual ground may occasionally open up beneath us. ■



Also in this section

64 Lunar spaceflight

64 AI and demography

65 Finding new antibiotics

66 A chip that thinks and remembers

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Palaeontology

The living was easy

A new fossil, if confirmed, suggests life got started quickly on the ancient Earth

SCIENTISTS have a pretty good idea of how the Earth formed: it condensed, around 4.6 billion years ago, from the same cloud of dust and interstellar gas that gave birth to the sun and the rest of the solar system. They are less sure how and when life got going. Last year a group of researchers found evidence for stromatolites—small, layered mounds produced by photosynthesising bacteria—in rocks from Greenland that are 3.7 billion years old.

Now, though, the date of life's debut may be pushed back even further. As they report in *Nature*, a group of researchers led by Dominic Papineau from University College London have found what they think is the signature of living organisms in rocks from Quebec that date back to between 3.8 and 4.3 billion years ago. Intriguingly, the sort of life that Dr Papineau and his colleagues think they have found is very different from the sort that built the stromatolites. This suggests that even very early in its existence, Earth was hosting several different kinds of living organism.

The rock in question is a 3-kilometre-long swathe on the eastern shores of the Hudson Bay called the Nuvvuagittuq Greenstone Belt. It is mostly composed of pillow-shaped basalt, a type of rock formed when lava cools rapidly in seawater. When Dr Papineau visited the formation in 2008 he found unusual reddish-coloured outcrops of jasper, a type of quartz formed from compressed volcanic ash,

that contained odd-looking veins and nodules. Closer examination revealed rings, between 50 and 100 microns (a millionth of a metre) across. That made him sit up: similar rosette-shaped features have been found in younger, but still ancient, rock formations from Biwabik, in Minnesota, and Løkken, in Norway. They are thought to have been formed when micro-organisms decayed and were fossilised.

But that evidence was not quite conclusive. Similar-looking structures can also be formed by non-living, geological processes. So Dr Papineau gave the rock samples to Matthew Dodd, his PhD student, to look at. Within the veins and nodules of the jasper that intrigued his boss, Mr Dodd found hollow tubes between 2 and 14 microns in diameter and up to 0.5mm long made of haematite, a mineralised form of iron oxide. Some of these filaments form networks anchored to a lump of haematite; others are corkscrew-shaped.

The team contends that these bear more than a passing resemblance to the networks of bacteria that live in hydrothermal vents—towering, crenellated structures that form in the deep ocean above the boundaries between tectonic plates, where superheated mineral-laden water spurts up from beneath the seabed. Well-preserved fossil remnants of these microbes have been found at many sites younger than Nuvvuagittuq, and they closely resemble the coiled and branching

tubes that Dr Papineau and his colleagues have found.

Such a find is doubly intriguing because hydrothermal vents are seen as a plausible candidate for the cradle of life. Microscopic pores in the rock might have served as natural cell walls, and the chemistry of the water could provide exactly the sort of energy gradient that a primitive living cell would have needed to go about its biochemical business. Although the sorts of bacteria apparently found by Dr Papineau and his colleagues are too complicated to reveal much about the very earliest organisms, the suggestion that hydrothermal vents have played host to life for so long is a strike in the theory's favour.

Bacteria to the future

The find—which will face fierce scrutiny from other palaeobiologists—has other implications, too. Most living organisms, including those that built the stromatolites, ultimately derive their energy from photosynthesis, the process by which plants and some micro-organisms convert sunlight into sugar. The creatures that live around hydrothermal vents are fundamentally different: no sunlight penetrates so deep into the oceans, so the food chains of such ecosystems are based on reactions between the dissolved chemicals that well up from the crust.

If Dr Papineau's fossils are as old as he thinks, that implies that Earth was, within a few hundred million years of its formation, already playing host to very diverse sorts of life. One of the biggest questions in science is whether life is an inevitable and common consequence of the laws of chemistry, or a lucky one-off confined to Earth alone. If life got going on Earth so quickly, and was able to diversify so rapidly, it suggests the same might have happened elsewhere, too. ■

Lunar spaceflight

Fly who to the Moon?

One race to the Moon is nearing its end. Another is just beginning

THE \$30m Google Lunar XPRIZE has had a slow time of it. Set up in 2007, it originally required competitors to land robots on the Moon by 2012. But the interest in returning to the Moon that the prize sought to catalyse did not quickly materialise; faced with a dearth of likely winners, the XPRIZE Foundation was forced to push back its deadline again and again. Now, though, five competing teams have launch contracts to get their little marvels to the Moon by the end of this year. And as those robotic explorers head into the final straight, a new contest is opening up.

On February 27th Elon Musk said that SpaceX, his aerospace company, had agreed to send two paying customers around the Moon some time in 2018, using a new (and as yet untried) version of its Falcon rocket, the Falcon Heavy. They would be the first people to travel beyond low-Earth orbit since 1972. Two weeks before Mr Musk's announcement, NASA said it was considering using the first flight of its new rocket, the Space Launch System (SLS; also untested), to do something similar, though with astronauts, not paying tourists. The race, it seems, is on.

This is not, though, a simple story of private sector versus public. For one thing, SpaceX can offer such a trip only thanks to NASA's previous largesse. The company's Dragon space capsule, in which the Moon tourists would fly, was developed to carry first cargo and, soon, people up to the International Space Station—services for which

NASA pays generously. For another, NASA might end up deciding to pay SpaceX for its Moon jollies, just as it pays for rides to the space station.

In January an adviser to Donald Trump sent an e-mail to senior Republicans interested in space policy suggesting an "internal competition between Old Space and New Space" at the agency to get people back to lunar orbit. "Old Space" almost certainly meant the in-house SLS effort; "New Space" probably means SpaceX—or possibly Blue Origin, a company owned by Jeff Bezos, the founder of Amazon, which is also working on a suitably big rocket. A New Space option would seem to make budgetary sense. Though the Falcon Heavy needed for SpaceX's Moon trip has yet to fly, it is certain to be far cheaper than the SLS. But the SLS has a great deal of support in the Senate—and there are some in Washington who have their doubts about making the country's space programme too dependent on sometimes capricious billionaires.

The new administration has yet to weigh in—or to appoint a NASA administrator. But its ambitions may have been hinted at when Mr Trump evoked some of the wonders the United States might achieve by the time of its sesquicentenary in this week's speech to Congress: "American footprints on distant worlds," he said, "are not too big a dream." The only distant world any foot will be leaving prints on by 2026 is the Moon.

Such feet do not have to be American. China sent a rover called Yutu to the Moon in 2013, and plans a mission to return rocks to Earth this year. The idea of landing people on the Moon by 2030, or perhaps even earlier, has been discussed in public. That brings the possibility of yet another race.

In all such races it would be wise, as the XPRIZE shows, to expect delays. The crew-carrying version of the Dragon is not ex-

pected to make its first flight to the space station until the middle of 2018 at the earliest: sending one around the Moon by the end of that year is a tall order. That said, SpaceX's customers may not mind if the schedule slips to 2019—the 50th anniversary of the first Apollo Moon landing would add yet more pizzazz to what is sure to be a very high-profile venture.

Who the purchasers of this pizzazz might be is not yet known, though one, at least, must be very rich. One possibility is Steve Jurvetson, a venture capitalist on SpaceX's board. Another is the film-maker James Cameron, who directed "Avatar", the most profitable film ever made. Mr Cameron has already plumbed the Mariana Trench in a submersible; in 2011 he showed interest in a privately funded Russian mission to the Moon. Having such a film-maker on board would certainly ensure that the trip was spectacularly documented. With the right lenses, he might even pick out the tiny XPRIZE rovers as he flashes by. ■

Artificial intelligence

Neighbourhood watch

Millions of street-level images give insights into America's demography

"WOULD it not be of great satisfaction to the king to know, at a designated moment every year, the number of his subjects?" A military engineer by the name of Sébastien le Prestre de Vauban posed this question to Louis XIV in 1686, pitching him the idea of a census. All France's resources, the wealth and poverty of its towns and the disposition of its nobles would be counted, so that the king could control them better.

These days, such surveys are common. But they involve a lot of shoe-leather, and that makes them expensive. America, for instance, spends hundreds of millions of dollars every year on a socioeconomic investigation called the American Community Survey; the results can take half a decade to become available. Now, though, a team of researchers, led by Timnit Gebru of Stanford University in California, have come up with a cheaper, quicker method. Using powerful computers, machine-learning algorithms and mountains of data collected by Google, the team carried out a crude, probabilistic census of America's cities in just two weeks.

First, the researchers trained their machine-learning model to recognise the make, model and year of many different types of cars. To do that they used a labelled data set, downloaded from automo- ►►



The grandest tour

► tive websites like Edmunds and Cars.com. Once the algorithm had learned to identify cars, it was turned loose on 50m images from 200 cities around America, all collected by Google's Streetview vehicles, which provide imagery for the firm's mapping applications. Streetview has photographed most of the public streets in America, and in among them the researchers spotted 22m different cars—around 8% of the number on America's roads.

The computer classified those cars into one of 2,657 categories it had learned from studying the Edmunds and Cars.com data. The researchers then took data from the traditional census, and split them in half. One half was fed to the machine-learning algorithm, so it could hunt for correlations between the cars it saw on the roads in those neighbourhoods and such things as income levels, race and voting intentions. Once that was done, the algorithm was tested on the other half of the census data, to see if these correlations held true for neighbourhoods it had never seen before. They did. The sorts of cars you see in an area, in other words, turn out to be a reliable proxy for all sorts of other things, from education levels to political leanings. Seeing more sedans than pickup trucks, for instance, strongly suggests that a neighbourhood tends to vote for the Democrats.

The system has limitations: unlike a census, it generates predictions, not facts, and the more fine-grained those predictions are the less certain they become. The researchers reckon their system is accurate to the level of a precinct, an American political division that contains about 1,000 people. And because those predictions rely on the specific, accurate data generated by traditional surveys, it seems unlikely ever to replace them.

On the other hand, it is much cheaper and much faster. Dr Gebru's system ran on a couple of hundred processors, a modest amount of hardware by the standards of artificial-intelligence research. It nevertheless managed to crunch through its 50m images in two weeks. A human, even one who could classify all the cars in an image in just ten seconds, would take 15 years to do the same.

The other advantage of the AI approach is that it can be re-run whenever new data become available. As Dr Gebru points out, Streetview is not the only source of information out there. Self-driving cars, assuming they catch on, will use cameras, radar and the like to keep track of their surroundings. They should, therefore, produce even bigger data sets. (Vehicles made by Tesla, an electric-car firm, are capturing such information even now.) Other kinds of data, such as those from Earth-imaging satellites, which Google also uses to refresh its maps, could be fed into the models, too. De Vauban's "designated moment" could soon become a constantly updated one. ■



Finding new antibiotics

The 48 uses of dragon's blood

Komodo dragons could be the source for a new generation of antibiotics

MYTHOLOGY is rich with tales of dragons and the magical properties their innards possess. One of the most valuable bits was their blood. Supposedly capable of curing respiratory and digestive disorders, it was widely sought. A new study has provided a factual twist on these fictional medicines. Barney Bishop and Monique van Hoek, at George Mason University in Virginia, report in *The Journal of Proteome Research* that the blood of the Komodo dragon, the largest living lizard on the planet, is loaded with compounds that could be used as antibiotics.

Komodo dragons, which are native to parts of Indonesia, ambush large animals like water buffalo and deer with a bite to the throat. If their prey does not fall immediately, the dragons rarely continue the fight. Instead, they back away and let the mix of mild venom and dozens of pathogenic bacteria found in their saliva finish the job. They track their prey until it succumbs, whereupon they can feast without a struggle. Intriguingly, though, Komodo dragons appear to be resistant to bites inflicted by other dragons.

Most animals—not just Komodo dragons—carry simple proteins known as antimicrobial peptides (AMPS) as general-purpose weapons against infection. But if the AMPS of Komodo dragons are potent enough to let them shrug off otherwise-fatal bites from their fellow animals, they are probably especially robust. And that could make them a promising source of chemicals upon which to base new antibiotics.

With that in mind, and working with the St Augustine Alligator Farm Zoological Park in Florida, Dr Bishop obtained fresh Komodo dragon blood. He examined the blood for peptides with molecular weights, lengths, electrical charges and chemical characteristics that were similar to those from known AMPS. He then analysed the peptides using a mass spectrometer and a combination of commercial and home-brewed software to identify which of the newly discovered peptides were likely to have medicinal potential.

The team identified 48 potential AMPS that had never been seen before. Their initial tests were equally promising. Dr Van Hoek exposed two species of pathogenic bacteria, *Pseudomonas aeruginosa* and *Staphylococcus aureus*, to eight of the most promising peptides they had identified. The growth of both species of bacteria was severely hampered by seven of the eight; the remaining peptide was effective against only *P. aeruginosa*.

There results are noteworthy. Antibiotic-proof bacteria are an increasing problem in hospitals. Such bugs are now thought to kill some 700,000 people each year around the world, and *P. aeruginosa* and *S. aureus* are parental strains for some of the most menacing types. On February 27th the World Health Organisation named both in its first-ever list of "priority pathogens", for which drug-resistance is a serious problem. Dr Bishop's findings hint that the blood of dragons may yet prove to be as useful against disease as myths suggest.

Electronics

One chip to rule them all

A new type of chip could transform small devices

ELECTRONICS has long relied on a division of labour. At the heart of myriad devices, from computers and smartphones to drones and dishwashers, a microprocessor can be found busily crunching data. Switch the power off, though, and this chip will forget everything. Devices therefore contain other, different sorts of chips that work as a memory. That is inefficient, because shuffling data between the two types of chip costs time and energy. Now, though, a group of researchers working in Singapore and Germany think they have found a way to make a single chip work as both a processor and a memory.

Both sorts of existing chip rely on transistors. These are tiny electronic switches, the ons and offs of which represent the ones and zeroes of the digital age. In the quest for speed, a processor's transistors need to be able to flip rapidly between those two states. This speed is bought, however, at the cost of the forgetfulness that makes a separate memory essential. Meanwhile, the non-forgetful transistors used in a computer's permanent form of memory are too slow to make useful processors. To make a chip which can do both has led some scientists to look at abandoning transistors altogether.

Among those scientists are Anupam Chattopadhyay of Nanyang Technological University, in Singapore; Rainer Waser of RWTH Aachen University, in Germany; and Vikas Rana of the Jülich Research Centre, also in Germany. The chips they are interested in are made of tiny "cells" instead of transistors. Each cell has two electrodes (a transistor has three), and these sandwich a layer of metal oxide. This oxide (commonly of tantalum or hafnium) changes its state of electrical resistance in response to pulses of charge passed through it by the electrodes. The change in resistance is caused by the movement within the oxide of some of the oxygen ions which make up its crystal lattice.

In a simple version of such a cell, a high state of resistance is read as a digital "one" and a low resistance as a digital "zero". Crucially, the relocated oxygen ions stay put when the power is switched off. This means the arrangement can act as a data store, known as a resistive random-access memory, or **ReRAM**. Several chipmakers, including Panasonic, Fujitsu, HP, SanDisk and Crossbar (a Californian startup), have begun manufacturing **ReRAM** chips, and many in the industry think that, memory-

wise, they are the wave of the future.

Drs Chattopadhyay, Waser and Rana, however, believe that to focus on memory is to undersell the new chips. They note that, though not as fast as a top-flight microprocessor, **ReRAM** nevertheless switches states much faster than conventional memory—fast enough, they think, for it to do computing as well as data storage. Moreover, **ReRAM** has other features that might make it a good processor.

With two instead of three electrodes, **ReRAMs** should be easier to manufacture and allow lots of cells to be packed tightly into a small space. Of particular significance is that, unlike a transistor, a **ReRAM** cell can be designed to do more than just switch "on" and "off". It can, if built correctly, have multiple levels of resistance, each representing a number. Such a system would be able to store more data in a given space. On top of that, it might not be confined to doing binary arithmetic. This matters, because certain computations which are hard and slow in binary logic might be managed easily and quickly in arithmetical systems of higher base.

So far, the three researchers have managed to construct a tantalum-based **ReRAM** with seven states of resistance. Eight are possible, and perhaps more, with more research. Eight levels is a good initial target, because it would permit the representation in a single cell of all possible three-digit binary numbers (ie, 000, 001, 010, 011, 101, 111, 110 and 100). A conventional chip would need three transistors to do this.

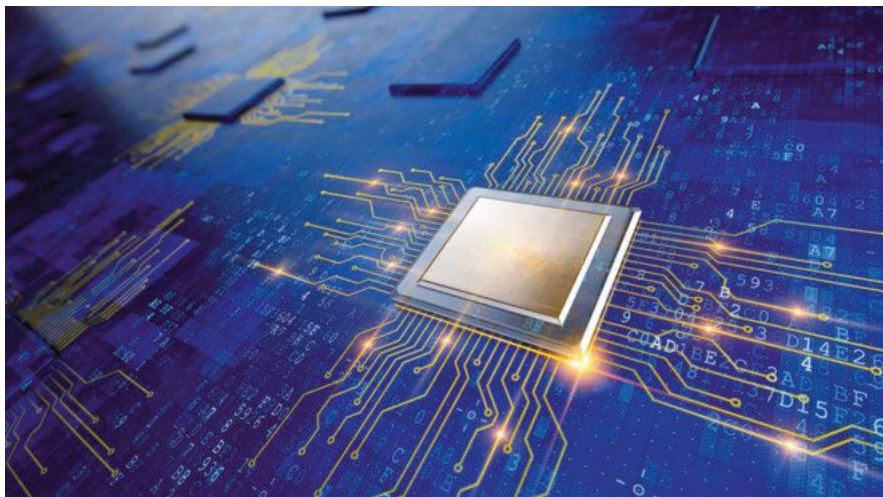
Sticking with binary arithmetic would

make it easier to use existing software with such a system. But eight states of resistance could also, in principle, be used to do arithmetic directly in base eight. And, because eight is an exact power of two, swapping between the two bases in response to the requirements of the software involved could be done efficiently.

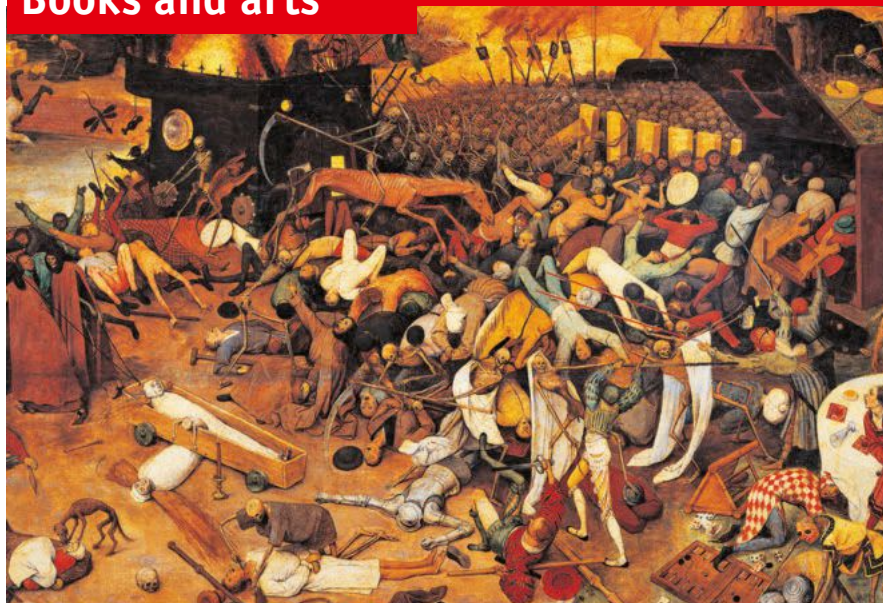
Drs Chattopadhyay, Waser and Rana have not yet got that far. But, in a paper in *Scientific Reports*, they describe a successful demonstration of a ternary (base three) numbering system. They carried out a form of calculation called modular arithmetic, which is more efficiently executed when done with higher-base numbers.

Dr Rana acknowledges that a dual-action **ReRAM** would necessarily need specific circuitry, to handle both processing and memory, and require a bespoke set of operating instructions to deal with bases higher than two. These would take several years to develop commercially. He believes, though, that there is no reason why the result would not be able to work with existing computer-operating systems, such as Windows, iOS and Linux.

Dual-action **ReRAM** chips might not match the fastest processors, which operate at a rate of gigahertz (billions of cycles a second). It is more likely that they would work in the high megahertz range (millions of cycles a second), at least initially. But this would be enough for many applications and, in a field where miniaturisation is at a premium, a combined processor-memory would let devices become smaller. An additional benefit is that because less energy is required to control ions, compared with the small and feisty electrons which transistors switch, such chips would have a much lower power consumption. These factors make them attractive for products like sensors, wearable gadgets and medical items. What's more, computer scientists might be able to break the bonds of binary thinking that have constrained them since their subject was invented. ■



Resistance for change



Violence and inequality

Apocalypse then

Only catastrophic events really reduce inequality, according to a historical survey

AS A supplier of momentary relief, the Great Depression seems an unlikely candidate. But when it turns up on page 363 of Walter Scheidel's "The Great Leveler" it feels oddly welcome. For once—and it is only once, for no other recession in American history boasts the same achievement—real wages rise and the incomes of the most affluent fall to a degree that has a "powerful impact on economic inequality". Yes, it brought widespread suffering and dreadful misery. But it did not bring death to millions, and in that it stands out.

If that counts as relief, you can begin to imagine the scale of the woe that comes before and after. Mr Scheidel, a Vienna-born historian now at Stanford University, puts the discussion of increased inequality found in the recent work of Thomas Piketty, Anthony Atkinson, Branko Milanovic and others into a broad historical context and examines the circumstances under which it can be reduced.

Having assembled a huge range of scholarly literature to produce a survey that starts in the Stone Age, he finds that inequality within countries is almost always either high or rising, thanks to the ways that political and economic power buttress each other and both pass down generations. It does not, as some have suggested, carry within it the seeds of its own demise.

Only four things, Mr Scheidel argues, cause large-scale levelling. Epidemics and pandemics can do it, as the Black Death did

The Great Leveler: Violence and the History of Inequality from the Stone Age to the Twenty-First Century. By Walter Scheidel. Princeton University Press; 504 pages; \$35 and £27.95

when it changed the relative values of land and labour in late medieval Europe. So can the complete collapse of whole states and economic systems, as at the end of the Tang dynasty in China and the disintegration of the western Roman Empire. When everyone is pauperised, the rich lose most. Total revolution, of the Russian or Chinese sort, fits the bill. So does the 20th-century sibling of such revolutions: the war of mass-mobilisation.

And that is about it. Financial crises increase inequality as often as they decrease it. Political reforms are mostly ineffectual, in part because they are often aimed at the balance of power between the straightforwardly wealthy and the politically powerful, rather than the lot of the have-nots. Land reform, debt relief and the emancipation of slaves will not necessarily buck the trend much, though their chances of doing so a bit increase if they are violent. But violence does not in itself lead to greater equality, except on a massive scale. "Most popular unrest in history", Mr Scheidel writes, "failed to equalise at all."

Perhaps the most fascinating part of this book is the careful accumulation of evidence showing that mass-mobilisation

Also in this section

68 Steven Cohen, SAC Capital

68 Norse mythology

69 Johnson: Lexical treasures

70 German fiction: Lutz Seiler's "Kruso"

70 "Moonlight" at the Oscars

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warfare was the defining underlying cause of the unprecedented decrease in inequality seen across much of the Western world between 1910 and 1970 (though the merry old Great Depression lent an unusual helping hand). By demanding sacrifice from all, the deployment of national resources on such a scale under such circumstances provides an unusually strong case for soaking the rich.

Income taxes and property taxes rose spectacularly during both world wars (the top income-tax rate reached 94% in America in 1944, with property taxes peaking at 77% in 1941). Physical damage to capital goods slashed the assets of the wealthy, too, as did post-war inflations. The wars also drove up membership in trade unions—one of the war-related factors that played a part in keeping inequality low for a generation after 1945 before it started to climb back up in the 1980s.

The 20th century was an age of increasing democratisation as well. But Mr Scheidel sees this as another consequence of its total wars. He follows Max Weber, one of the founders of sociology, in seeing democracy as a price elites pay for the co-operation of the non-aristocratic classes in mass warfare, during which it legitimises deep economic levelling. Building on work by Daron Acemoglu and colleagues, Mr Scheidel finds that democracy has no clear effect on inequality at other times. (A nice parallel to this 20th-century picture is provided by classical Athens, a democracy which also saw comparatively low levels of income inequality—and which was also built on mass-mobilisation, required by the era's naval warfare.)

Catastrophic levellings will be less likely in future. Pandemics are a real risk, but plagues similar in impact to the Black Death are not. Nor are total revolutions and wars fought over years by armies of millions. On top of that, since the Industri- ►

al Revolution general prosperity, regardless of inequality, has risen. And in past decades global inequality has fallen.

Good news in general, but news which leaves readers who would like to see significantly less unequal individual economies in a bit of a pickle. Futile though Mr Scheidel thinks it may prove, attempts to ease inequality democratically through redistributive policies and the empowerment of labour at least show no signs of doing actual harm. They may, indeed, keep the further growth of inequality in check, but they can hardly dent the direction of change. And they may have opportunity costs; if history provides no support for thinking that deep, peaceful reduction of inequality is possible, perhaps progressives should set themselves other tasks.

There are two other possibilities. One is to note that historical circumstances change. As Mr Scheidel shows, the 20th century was quite different from all those that came before. Is it not possible that another less horrible but equally profound transformation in the way that people and nations get along with each other, or fail to, is yet to come? If, for example, increasingly economically important non-human intelligences decided that they would rather not be owned by anyone, thus in effect confiscating themselves from their owners, could that not make a difference?

The other possibility is that some may see civilisational collapse as a price worth paying for the Utopia they might build in the rubble—or may just like to see the world burn. Individuals and small groups can dream of nuclear- or biotechnologically-mediated violence today on a scale that was inconceivable in the past. Wealth may ineluctably concentrate itself over time; the ability to destroy does not. ■

Wall Street

Stevie wonder

Black Edge: Inside Information, Dirty Money and the Quest to Bring Down the Most Wanted Man on Wall Street. By Sheelah Kolhatkar. Random House; 344 pages; \$28

IN THE late 1990s your reviewer worked on the trading floor of a bank. It was understood there that if you walked out of a meeting with profitable gossip about, say, a takeover, one client should always get the first phone call: SAC Capital, an American hedge fund, run by Steven Cohen. “Stevie” was, according to his legend, a day-trading idiot savant, a bully and a moneymaking genius who, when he wasn’t staring at his screens, was trying to prove his sophistication by paying top dollar for trophy works



Say aah!

of art, such as Damien Hirst’s pickled shark (pictured). He paid so much in fees that the banks ate out of his hands.

Almost 20 years on Mr Cohen’s strange ascent to the pinnacle of American society, and the efforts of regulators to jail him for insider dealing, are the subject of Sheelah Kolhatkar’s excellent new book, “Black Edge”. Earlier books on Wall Street, such as “Barbarians at the Gate” and “Liar’s Poker”, describe the macho era of junk bonds and leveraged buy-outs in the 1980s. “Too Big to Fail”, which came out in 2009, recounts the bail-out of those banks. “Black Edge” tackles the rise of speculative hedge funds over the past two decades, of which SAC was, for a while, perhaps the most powerful.

In the late 1990s it became harder for investors to beat the market. The “Reg FD” rule, passed in 2000, required companies to disclose information to all investors at the same time. Computing and brain power rose on Wall Street, with the cream of the Ivy League crunching data for nuggets that others had not spotted. In the arms race to find a new “edge”, some firms installed their computer cabling close to the stock exchange to get data a millisecond faster. Mr Cohen took a different route.

Having learned the ropes at an old-school firm, he set up SAC as a kind of corporate espionage agency. He paid huge commissions to banks for information. By 1998 he was Goldman Sachs’s biggest equities client. And he hired analysts to befriend talkative strangers at companies or watch factory gates in Taiwan; anything to get an advantage to help Mr Cohen’s trades. Before the financial crisis SAC had \$17bn of assets and an average annual return of 30% for 18 years, an enviable record.

Too good, concluded regulators, who laid siege to SAC to try to prove that the firm was profiting from insider information. Eventually, several traders and analysts pleaded guilty or were convicted.

Mathew Martoma, a habitual liar who had been expelled by Harvard Law School for faking his grades, and who made huge illegal trades on pharmaceutical firms, was jailed. But Mr Cohen always managed to be several steps away from the insider information. In 2013 SAC at last agreed to say that it had engaged in fraud, to close its doors to outside money and pay a fine. Mr Cohen, who has not admitted guilt, will be free to open a new fund next year.

Three themes stand out in “Black Edge”. One is the hollow life of the protagonist. Clad in a fleece, surrounded by 12 screens, masseuses, a manipulative wife, a hostile ex-wife and a cast of millionaire sycophants whom he periodically culls, Mr Cohen cuts a sad figure. The second theme is the decay of the industry’s ethics. The banks still do business with Mr Cohen, and if he opens a new fund, supposedly reputable firms will line up to give him money. The last theme is the feebleness of enforcement. Mr Cohen’s government pursuers were comprehensively outwitted by his lawyers. In fictional accounts of high finance—in Tom Wolfe’s novel, “The Bonfire of the Vanities”, or “Wall Street”, directed by Oliver Stone—the courts ultimately bring the biggest egos crashing down. In real life the law has much less power. ■

Norse mythology

Stories from the top of the world

Norse Mythology. By Neil Gaiman. Norton; 293 pages; \$25.95. Bloomsbury; £20

The Norse Myths: A Guide to the Gods and Heroes. By Carolyn Larrington. Thames and Hudson; 208 pages; \$24.95 and £12.95

IN 1876 William Morris published his epic poem about Sigurd the Volsung, and Richard Wagner put on his first “Ring” cycle at Bayreuth. Norse mythology has long been a staple of Western culture. “The Hobbit” and “The Lord of the Rings” drew heavily on Norse literature. Marvel introduced Thor and Loki to American comic-book readers in the middle of the 20th century. “Game of Thrones”, a television phenomenon, owes a debt of gratitude to Norse culture, as do any number of computer games. Though each approaches the myths in a different way, one thing they have in common is length: Morris’s poem is more than 10,000 lines long, the “Ring” cycle runs for some 15 hours and the original manuscript for “The Lord of the Rings” covered more than 9,000 pages.

Two new books on Norse mythology are mercifully short, however, running to just over 500 pages between them. But ►►

▶ what they lack in length they make up for in ambition.

Neil Gaiman's "Norse Mythology" seems the more modest: it is a simple retelling of the backbone of myths from the creation of gods and men to Ragnarok, the final battle of the gods, when "brothers will fight brothers, fathers will kill sons" and the sun will vanish from the sky. But it is a bold undertaking. Mr Gaiman, a prolific and prize-winning fantasy writer, has plundered these same stories and characters many times before, notably in "American Gods". The tv series will start later this year. Expectations are high.

For readers new to the myths or to Mr Gaiman, "Norse Mythology" is an excellent introduction to the stories that wield such great cultural influence. It is impossible not to see echoes of these ancient tales in works over the centuries. For example, when Loki loses a wager in which he had bet his head, he wriggles out by arguing that the victors can have his head but they have no claim on his neck. Portia in "The Merchant of Venice" no doubt read up on Norse mythology before turning to law.

Yet readers expecting Mr Gaiman's typical style—gentle, rhythmic prose intricately plotted and stuffed full of allusions—will

come away disappointed. His retelling is almost tentative, restricting itself to the core of the corpus. Giants, elves, dwarves and humans appear only as guest characters in the gods' stories. Nor does he try to embroider the well-worn plots or give the stories a context for modern times. If Thor visits a giant and demands a feast, he does so without explanation. The fact that this reflects the gods' high self-esteem, their power and the brutal, feudal nature of the societies from which these myths spring is left unsaid.

Readers would benefit from reading Mr Gaiman's book alongside "The Norse" ▶

Johnson | Lexical treasures

Why words die (and how to stop a few of them from keeling over)

BIOLOGISTS reckon that most species that have ever existed are extinct. That is true of words, too. Of the Oxford English Dictionary's 231,000 entries, at least a fifth are obsolete. They range from "aa", a stream or waterway (try that in Scrabble), to "zymome", "that constituent of gluten which is insoluble in alcohol".

That is surely an undercounting. The English have an unusually rich lexicon, in part because first they were conquered (by the Vikings and Norman French) and then they took their turn conquering large swathes of the Earth, in Asia, North America and Africa. Thousands of new words entered the standard language as a result. Many more entered local dialects, which were rarely written down. The OED only includes words that have been written.

Dedicated researchers have managed to capture some of the unwritten ones. For the Dictionary of American Regional English (DARE), researchers conducted thousands of interviews—usually with older country folk—who still spoke their regional dialect. They found such treasures as "to pungle up", meaning for someone to produce money or something else owed, and "the mulligrubs": indigestion and, by extension, a foul mood.

The smaller and more local a word, the more danger it faces of dying out. DARE's editors trekked out to find old people in the countryside precisely because younger urban speakers are more likely to adopt metropolitan norms, whether "broadcast standard" in America or "BBC English" in Britain. Other factors gave this homogenising trend a boost: advertising, which tends to standardise the names of things bought and sold in national markets, and the rise of American popular culture and global mass media in the second half of the 20th century.

A study published in 2012 found some



evidence for this homogenisation. It looked through a huge trove of books published since 1800, scanned and made searchable by Google, and found that the death rate of words seems to have speeded up in English (and also in Spanish and Hebrew) since about 1950. One cause is the death of perfect synonyms in an era of mass communications: the words "radio-gram" and "roentgenogram", both meaning the same thing, were eventually edged out by "x-ray", the world having no need for three labels for the same thing.

But DARE's editors resist the standardisation hypothesis. What people call their grandparents—for example, "gramps and gram" or "mee-maw and papaw"—is more immune to the steamroller of national norms. In fact, these words are especially stubborn precisely because they give people an emotional connection to where they come from.

Some words were never a great loss in

the first place. The OED has "respair", both as a noun and verb, meaning the return of hope after a period of despair—an obvious etymological kissing-cousin. But the great dictionary's only citation for this dates back to 1425. For whatever reason, "respair" is a word that English-speakers decided they could happily live without. The OED also includes a host of terms from the "inkhorn" period of English word-coinage, when writers readily made up new words from Greek and Latin roots. These include such forgettables as "suppeditate", meaning "subdued" or "overcome". Good riddance to them.

Some words hang on in a sort of life-support state, frozen in a single usage but otherwise forgotten. Who uses the verb "to wend", except in the fixed expression "to wend one's way somewhere"? (Bonus fact: the past tense of "wend" replaced the old past tense of "to go", which is why we say "I went".) Had Shakespeare not memorialised the name of a small siege explosive in the phrase to be "hoist with his own petard", meaning a small bomb but also linked to the French word for "fart", that would probably be gone, too.

Those who get the mulligrubs thinking about great old words dying can punge up for a subscription to DARE, helping those lexicographers keep adding words to the online edition. But a word needs to be used to live. So DARE has teamed up with Acast, a podcast producer, creating a list of 50 endangered American regionalisms, and trying to get Acast's podcasters to use them. Who can resist "to be on one's beanwater"—meaning "in high spirits"? And isn't "downpour" a bit workaday for heavy rain, when you could be calling it a "frog strangler"? No one wants to see English submit to boring homogenisation; using a few of these lexical rarities might offer some respair.

▶ **Myths** by Carolyne Larrington, an Oxford professor. She covers many of the same stories, and several more besides, in her guide to a broad swathe of the universe. Roaming far beyond Asgard, the realm of the gods, Ms Larrington tours Yggdrasil, the colossal ash tree that makes up the Norse cosmos, to introduce the giants, mortals and heroes and their own stories. Richly illustrated with photos of archaeological findings, the book makes the Norse gods and heroes solid, a pantheon actively worshipped by humans, rather than simply stories told at bedtime. She also points out how Christian influences crept into the myths as northern Europe turned away from its pagan past.

Her book, like Mr Gaiman's, ends with *Ragnarok*. The gods of Asgard go to battle against the giants. Most perish. The world is consumed by fire and drowned in the seas. Ms Larrington shows how ambivalent Odin is about this end: the god who gave one eye for wisdom, who hung for nine days and nine nights from the ash tree without food or water to gain knowledge of the runes, constantly seeks fresh proof of the world's impending demise, hoping that someone may dispute it.

But no matter how much Odin, the wisest and mightiest of the gods, would like to write a different ending, time runs from creation to destruction, and then the cycle starts again. In most versions the new world that emerges is a fresh chance for gods and men alike. Ms Larrington is not entirely convinced: "There's no compelling reason to think that the new world will not go the same way as the old, that evil and corruption will not manifest themselves once again." The Norse myths are engaging, entertaining and educational, but they are not uplifting. ■

New fiction

Dreams and dreamers

Kruso. By Lutz Seiler. Translated by Tess Lewis. *Scribe*; 462 pages; £16.99

WITH its thin body and chunky head ("the seahorse with the sledgehammer muzzle"), the German island of Hiddensee faces northwest across the Baltic Sea towards the coast of Denmark. Part of East Germany during the cold war, Hiddensee became an "island of the blessed": an enclave of freethinkers where dreamers and idealists sought to escape the oppressive conformity of state socialism. Crucially, in "*Kruso*", an outstanding debut novel by Lutz Seiler which won the 2014 German Book prize, it became home to refugees—swimmers, or sailors in make-



Where the wild winds blow

shift craft—who tried to flee the GDR. Many drowned. Most were intercepted; but hundreds succeeded.

Mr Seiler's student hero, Ed Bendler, abandons his course after the trauma of his girlfriend's death to spend the summer of 1989 washing dishes in the Klausner Hotel on the island. Mr Seiler himself worked there in 1989. During East Germany's final months, Ed joins the Utopian community of "esskays"—slang for seasonal workers—as they toil, drink, love and explore the meaning of freedom, "all of them dedicated to the nebulous star of a liberated life". Drop-outs or dissidents, the rebels follow the charismatic Alexander Krusowitsch, known as Kruso. Son of a Soviet general, he leads this subversive platoon with "saintly earnestness" after his fugitive sister Sonya becomes one of the "unknown dead", swallowed by the sea.

Mr Seiler draws cleverly on the fiction of enchanted islands or refuges, from Thomas More's "*Utopia*" and Daniel Defoe's "*Robinson Crusoe*" to Thomas Mann's "*The Magic Mountain*". Above all, he evokes the moods of Hiddensee with visionary power and precision. Although a sophisticated fable of liberty and its discontents, "*Kruso*" roots every idea in the salty, sandy landscapes of this "last hope of all the freedom-seekers in this land".

Through a battered old radio, the castaways learned that "continents were shifting". Summer turns to autumn and the GDR crumbles like the eroding cliffs of Hiddensee. Ed's idyll must end, and an epilogue sets out the history behind this parable. Beautifully phrased and paced, Tess Lewis's translation delights on every page as she conveys "the contagious sense of liberation" that blows through Mr Seiler's mesmeric novel. As for the Klausner: it's still there. Off-season rates start at €30 (\$31.80) per person. ■

The Academy Awards

Gleaming in the moonlight

The final Oscar (finally) went to the best film, as more people will now discover

THE big shock at the Academy Awards on February 26th, aside from a kerfuffle over announcing the wrong winner for best picture, was that the right film actually won in the end. "*Moonlight*" is like no other film that has won best picture before: in terms of the story the film tells, how little was spent to tell it (\$1.6m) and just how few people saw it. Far more will see it now.

Based on a semi-autobiographical play by Tarell Alvin McCraney, "*Moonlight*" is the tale of a black gay youth's struggles growing up and coming of age as the son of a crack-addicted mother in the tough Miami neighbourhood of Liberty City. Barry Jenkins, another son of Liberty City, adapted the screenplay and directed it, splitting the story of the youth, Chiron, into three parts—as a boy, a teenager and then a man. The boy, neglected and verbally abused by his mother, finds a father figure in Juan, a drug dealer who gives him a second home and lessons in life. As a teenager he grows more distant from his mother and timidly explores his sexuality. As a man he has grown a hardened shell to protect himself from his childhood, but it begins to crack.

It is a hypnotic film, punctuated by small moving moments and meaningful silences, like the tension before a first kiss, or a question hanging without an answer. James Laxton, the cinematographer, washes the images in lush colours and contrasts which, accompanied by a subtle, occasionally soaring score by Nicholas Britell, give the film a dreamlike quality.

"*Moonlight*" received a rapturous reception from critics and eight Oscar nominations, including for both Mr Laxton and Mr Britell, as well as for Naomie Harris as the boy's mother. Mr Jenkins and Mr McCraney won for best adapted screenplay; Mahershala Ali won for best supporting actor in the role of Juan.

The academy's voters have shown a preference for smaller-budget films in recent years, but never for one as small as this. Seven of the previous eight winners of best picture cost between \$15m and \$20m; "*Moonlight*" was made for a tenth of that. The film's worldwide box-office total, \$26m, means that perhaps 300,000 people have seen it, far fewer than have seen previous winners (or "*La La Land*", this year's incorrectly-announced winner). But after the Oscars it became the best-selling movie on iTunes in America, and is already opening again in more cinemas. The story of "*Moonlight*" is just starting. ■

Economic data

% change on year ago

	Gross domestic product			Industrial production	Consumer prices		Unemployment	Current-account balance		Budget balance	Interest rates, %	Currency units, per \$	
	latest	qtr*	2016 ⁱ	latest	latest	2016 ⁱ	rate, %	latest 12 months, \$bn	% of GDP 2016 ⁱ	% of GDP 2016 ⁱ	10-year gov't bonds, latest	Mar 1st	year ago
United States	+1.9 Q4	+1.8	+1.6	nil Jan	+2.5 Jan	+1.3	4.8 Jan	-476.5 Q3	-2.6	-3.2	2.34	-	-
China	+6.8 Q4	+7.0	+6.7	+6.0 Dec	+2.5 Jan	+2.0	4.0 Q4 [§]	+210.3 Q4	+2.4	-3.8	2.96 ^{§§}	6.88	6.55
Japan	+1.7 Q4	+1.0	+0.9	+3.2 Jan	+0.3 Dec	-0.2	3.1 Dec	+190.9 Dec	+3.7	-5.2	0.10	114	114
Britain	+2.0 Q4	+2.9	+2.0	+4.3 Dec	+1.8 Jan	+0.7	4.8 Nov ^{††}	-138.1 Q3	-5.4	-3.7	1.13	0.81	0.72
Canada	+1.3 Q3	+3.5	+1.2	+1.5 Nov	+2.1 Jan	+1.5	6.8 Jan	-51.2 Q4	-3.5	-2.4	1.69	1.34	1.34
Euro area	+1.7 Q4	+1.6	+1.7	+2.0 Dec	+1.8 Jan	+0.2	9.6 Dec	+399.5 Dec	+3.3	-1.9	0.28	0.95	0.92
Austria	+1.7 Q4	+2.0	+1.5	+2.1 Dec	+2.0 Jan	+0.9	5.7 Dec	+8.0 Q3	+2.5	-1.0	0.58	0.95	0.92
Belgium	+1.2 Q4	+2.0	+1.2	+9.5 Dec	+3.0 Feb	+1.8	7.6 Dec	+3.4 Sep	+1.0	-3.0	0.68	0.95	0.92
France	+1.2 Q4	+1.7	+1.2	+1.3 Dec	+1.2 Feb	+0.3	9.6 Dec	-26.8 Dec [‡]	-1.1	-3.3	1.00	0.95	0.92
Germany	+1.8 Q4	+1.7	+1.8	-0.6 Dec	+2.2 Feb	+0.4	5.9 Feb	+294.5 Dec	+8.9	+0.6	0.28	0.95	0.92
Greece	+0.2 Q4	-1.4	+0.3	+2.1 Dec	+1.2 Jan	-0.8	23.0 Nov	-1.1 Dec	-0.6	-6.7	7.03	0.95	0.92
Italy	+1.1 Q4	+0.8	+0.9	+6.6 Dec	+1.5 Feb	-0.1	12.0 Dec	+50.7 Dec	+2.7	-2.5	2.12	0.95	0.92
Netherlands	+2.3 Q4	+2.0	+2.0	+4.8 Dec	+1.7 Jan	+0.1	6.4 Jan	+57.1 Q3	+8.1	-1.1	0.32	0.95	0.92
Spain	+3.0 Q4	+2.8	+3.2	-1.6 Dec	+3.0 Feb	-0.3	18.4 Dec	+24.6 Dec	+1.8	-4.6	1.76	0.95	0.92
Czech Republic	+1.6 Q3	+0.8	+2.3	+2.7 Dec	+2.2 Jan	+0.7	5.3 Jan [§]	+3.7 Q3	+1.6	nil	0.69	25.6	24.9
Denmark	+1.9 Q4	+0.9	+1.0	+10.0 Dec	+0.9 Jan	+0.3	4.3 Dec	+24.5 Dec	+7.3	-1.4	0.28	7.04	6.87
Norway	+1.8 Q4	+4.5	+0.6	-2.2 Dec	+2.8 Jan	+3.5	4.4 Dec ^{‡‡}	+18.1 Q4	+4.2	+3.5	1.70	8.40	8.67
Poland	+3.2 Q4	+7.0	+2.8	+9.0 Jan	+1.8 Jan	-0.7	8.6 Jan [§]	-2.5 Dec	-0.5	-2.5	3.85	4.07	3.99
Russia	-0.4 Q3	na	-0.5	+2.3 Jan	+5.0 Jan	+7.1	5.6 Jan [§]	+22.2 Q4	+2.0	-3.5	8.25	58.4	74.0
Sweden	+2.3 Q4	+4.2	+3.1	-0.9 Dec	+1.4 Jan	+1.0	7.3 Jan [§]	+22.2 Q3	+4.6	+0.2	0.53	9.04	8.63
Switzerland	+1.3 Q3	+0.2	+1.4	-1.2 Q4	+0.3 Jan	-0.4	3.3 Jan	+68.2 Q3	+9.4	+0.2	-0.21	1.01	1.00
Turkey	-1.8 Q3	na	+2.4	+1.2 Dec	+9.2 Jan	+7.8	12.1 Nov [§]	-32.6 Dec	-4.4	-1.1	10.94	3.66	2.95
Australia	+2.4 Q4	+4.4	+2.4	+1.0 Q4	+1.5 Q4	+1.3	5.7 Jan	-33.1 Q4	-3.1	-2.3	2.80	1.31	1.40
Hong Kong	+3.1 Q4	+4.8	+1.2	-0.1 Q3	+1.3 Jan	+2.4	3.3 Jan ^{††}	+13.6 Q3	+2.8	+1.3	1.85	7.76	7.77
India	+7.0 Q4	+4.9	+6.9	-0.4 Dec	+3.2 Jan	+4.8	5.0 2015	-11.1 Q3	-0.6	-3.8	6.93	66.8	67.9
Indonesia	+4.9 Q4	na	+5.0	+4.3 Dec	+3.8 Feb	+3.5	5.6 Q3 [§]	-16.3 Q4	-2.1	-2.3	7.50	13,362	13,350
Malaysia	+4.5 Q4	na	+4.3	+4.8 Dec	+3.2 Jan	+2.1	3.5 Dec [§]	+6.0 Q4	+1.9	-3.4	4.12	4.45	4.17
Pakistan	+5.7 2016**	na	+5.7	+7.0 Dec	+3.7 Jan	+3.8	5.9 2015	-4.9 Q4	-1.8	-4.6	7.59 ^{†††}	105	105
Philippines	+6.6 Q4	+7.0	+6.9	+23.0 Dec	+2.7 Jan	+1.8	4.7 Q4 [§]	+3.1 Sep	+0.9	-2.3	4.41	50.3	47.3
Singapore	+2.9 Q4	+12.3	+2.0	+2.2 Jan	+0.6 Jan	-0.5	2.2 Q4	+56.7 Q4	+19.0	-1.2	2.35	1.41	1.40
South Korea	+2.3 Q4	+1.6	+2.7	+1.7 Jan	+2.0 Jan	+1.0	3.8 Jan [§]	+98.7 Dec	+7.4	-1.6	2.16	1,131	1,237
Taiwan	+2.9 Q4	+1.8	+1.5	+2.8 Jan	+2.2 Jan	+1.4	3.8 Jan	+70.9 Q4	+13.4	-0.2	1.13	30.8	33.1
Thailand	+3.0 Q4	+1.7	+3.2	+1.3 Jan	+1.4 Feb	+0.2	1.2 Jan [§]	+46.4 Q4	+10.7	-2.1	2.67	35.0	35.6
Argentina	-3.8 Q3	-0.9	-2.2	-2.5 Oct	— ***	—	8.5 Q3 [§]	-15.7 Q3	-2.7	-4.7	na	15.4	15.9
Brazil	-2.9 Q3	-3.3	-3.5	nil Dec	+5.4 Jan	+8.1	12.6 Jan [§]	-23.8 Jan	-1.2	-6.3	10.00	3.12	3.98
Chile	+1.6 Q3	+2.5	+1.5	-0.9 Jan	+2.8 Jan	+3.8	6.2 Jan ^{§††}	-4.8 Q3	-1.3	-2.7	4.16	650	695
Colombia	+1.6 Q4	+4.0	+2.0	+2.2 Dec	+5.5 Jan	+7.5	11.7 Jan [§]	-13.7 Q3	-4.8	-3.8	7.12	2,935	3,274
Mexico	+2.4 Q4	+2.9	+2.1	-0.6 Dec	+4.7 Jan	+2.9	3.6 Jan	-27.9 Q4	-2.9	-2.6	7.42	19.9	17.9
Venezuela	-8.8 Q4~	-6.2	-14.1	na	na	+428	7.3 Apr [§]	-17.8 Q3~	-2.0	-24.3	10.43	9.99	6.31
Egypt	+4.5 Q2	na	+4.3	+17.2 Dec	+28.2 Jan	+13.8	12.4 Q4 [§]	-20.8 Q3	-6.9	-12.2	na	16.2	7.83
Israel	+4.2 Q4	+6.2	+4.0	-1.2 Dec	+0.1 Jan	-0.5	4.3 Jan	+13.3 Q3	+3.0	-2.2	2.37	3.65	3.89
Saudi Arabia	+1.4 2016	na	+1.4	na	-0.4 Jan	+3.5	5.6 2015	-46.8 Q3	-6.8	-12.2	na	3.75	3.75
South Africa	+0.7 Q3	+0.2	+0.5	-0.8 Dec	+6.6 Jan	+6.3	26.5 Q4 [§]	-12.3 Q3	-3.8	-3.4	8.79	13.0	15.7

Source: Haver Analytics. *% change on previous quarter, annual rate. [†]The Economist poll or Economist Intelligence Unit estimate/forecast. [§]Not seasonally adjusted. [‡]New series. ~2014 **Year ending June. ^{††}Latest 3 months. ^{†††}3-month moving average. ^{§§§}5-year yield. ***Official number not yet proved to be reliable; The State Street PriceStats Inflation Index, Jan 29.53%; year ago 30.79% ^{††††}Dollar-denominated bonds.

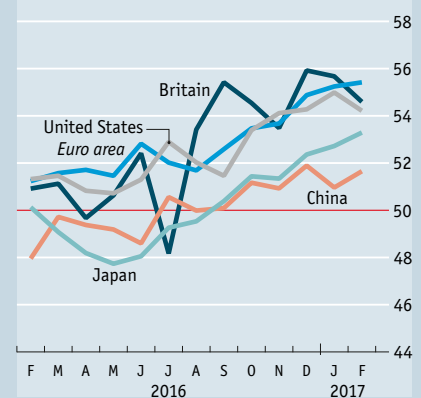
Markets

	Index Mar 1st	% change on		
		one week	Dec 30th 2016 in local currency terms	in \$ currency terms
United States (DJIA)	21,115.6	+1.6	+6.8	+6.8
China (SSEA)	3,399.9	-0.4	+4.6	+5.7
Japan (Nikkei 225)	19,393.5	+0.1	+1.5	+4.0
Britain (FTSE 100)	7,382.9	+1.1	+3.4	+3.0
Canada (S&P/TSX)	15,599.7	-1.5	+2.0	+2.5
Euro area (FTSE Euro 100)	1,145.7	+1.4	+3.0	+3.1
Euro area (EURO STOXX 50)	3,390.2	+1.5	+3.0	+3.1
Austria (ATX)	2,797.1	+0.4	+6.8	+6.9
Belgium (Bel 20)	3,660.5	+1.0	+1.5	+1.6
France (CAC 40)	4,960.8	+1.3	+2.0	+2.1
Germany (DAX)*	12,067.2	+0.6	+5.1	+5.2
Greece (Athex Comp)	656.2	+1.4	+1.9	+2.0
Italy (FTSE/MIB)	19,364.4	+2.5	+0.7	+0.8
Netherlands (AEX)	505.0	+1.2	+4.5	+4.6
Spain (Madrid SE)	984.0	+2.8	+4.3	+4.4
Czech Republic (PX)	972.0	-0.1	+5.5	+5.5
Denmark (OMXCX)	829.4	-0.4	+3.9	+4.0
Hungary (BUX)	33,343.1	-2.3	+4.2	+4.6
Norway (OSEAX)	773.5	+0.4	+1.2	+3.6
Poland (WIG)	59,646.3	+0.3	+15.2	+18.2
Russia (RTS, \$ terms)	1,109.4	-3.2	-3.7	-3.7
Sweden (OMXS30)	1,591.4	+0.6	+4.9	+5.4
Switzerland (SMI)	8,634.7	+0.6	+5.0	+5.8
Turkey (BIST)	89,320.3	+0.9	+14.3	+9.7
Australia (All Ord.)	5,750.9	-1.7	+0.6	+7.0
Hong Kong (Hang Seng)	23,776.5	-1.8	+8.1	+7.9
India (BSE)	28,984.5	+0.4	+8.9	+10.6
Indonesia (JSX)	5,363.1	+0.1	+1.3	+2.1
Malaysia (KLSE)	1,697.7	-0.6	+3.4	+4.3
Pakistan (KSE)	48,992.2	nil	+2.5	+2.1
Singapore (STI)	3,122.8	nil	+8.4	+11.1
South Korea (KOSPI)	2,091.6	-0.7	+3.2	+10.2
Taiwan (TWI)	9,674.8	-1.1	+4.6	+9.6
Thailand (SET)	1,567.2	-0.3	+1.6	+4.0
Argentina (MERV)	19,359.0	-2.8	+14.4	+17.4
Brazil (BVSP)	66,988.9	-2.3	+11.2	+16.1
Chile (IGPA)	22,007.8	+0.6	+6.1	+9.4
Colombia (IGBC)	9,889.7	-0.4	-2.1	+0.1
Mexico (IPC)	47,454.2	+0.5	+4.0	+7.4
Venezuela (IBC)	36,228.8	+3.9	+14.3	na
Egypt (EGX 30)	11,998.7	-3.2	-2.8	+9.1
Israel (TA-100)	1,284.3	-0.4	+0.6	+6.0
Saudi Arabia (Tadawul)	6,966.5	-1.4	-3.7	-3.7
South Africa (JSE AS)	51,682.2	-0.8	+2.0	+7.0

Manufacturing activity

The British manufacturing sector continues to confound expectations of a post-Brexit slowdown, according to the latest data from IHS Markit, a research firm. Britain's purchasing managers' index (PMI) was 54.6 in February (a reading above 50 indicates manufacturing activity is expanding.) This was below a two-and-a-half-year high set in December, but still well above the long-term average of 51.6. The euro area also shrugged off political uncertainty surrounding forthcoming national elections: its PMI rose to the highest level since April 2011. Chinese manufacturing activity was in the doldrums at the start of last year, but began to recover in July after increased government spending boosted construction.

Purchasing managers' index*



*Based on a survey of purchasing executives. A reading above/below 50 indicates manufacturing is generally expanding/contracting compared with the previous month
Sources: IHS Markit; CIPS; Caixin; Nikkei

Other markets

	Index Mar 1st	% change on		
		one week	Dec 30th 2016 in local currency terms	in \$ currency terms
United States (S&P 500)	2,396.0	+1.4	+7.0	+7.0
United States (NAScomp)	5,904.0	+0.7	+9.7	+9.7
China (SSEB, \$ terms)	350.1	+0.3	+2.4	+2.4
Japan (Topix)	1,553.1	-0.3	+2.3	+4.8
Europe (FTSEurofirst 300)	1,481.3	+0.6	+3.7	+3.8
World, dev'd (MSCI)	1,856.3	+0.8	+6.0	+6.0
Emerging markets (MSCI)	938.5	-1.3	+8.8	+8.8
World, all (MSCI)	448.4	+0.5	+6.3	+6.3
World bonds (Citigroup)	886.5	nil	+0.3	+0.3
EMBI+ (JPMorgan)	797.2	+0.1	+3.2	+3.2
Hedge funds (HFRX)	1,223.1 ¹	-0.2	+1.6	+1.6
Volatility, US (VIX)	12.5	+11.7	+14.0 (levels)	
CDSs, Eur (iTRAXX) ¹	70.9	-3.6	-1.7	-1.7
CDSs, N Am (CDX) ¹	60.1	-3.8	-11.3	-11.3
Carbon trading (EU ETS) €	5.9	+10.7	-10.2	-10.1

Sources: Markit; Thomson Reuters. *Total return index.

¹Credit-default-swap spreads, basis points. ²Feb 28th.

Indicators for more countries and additional series, go to: Economist.com/indicators

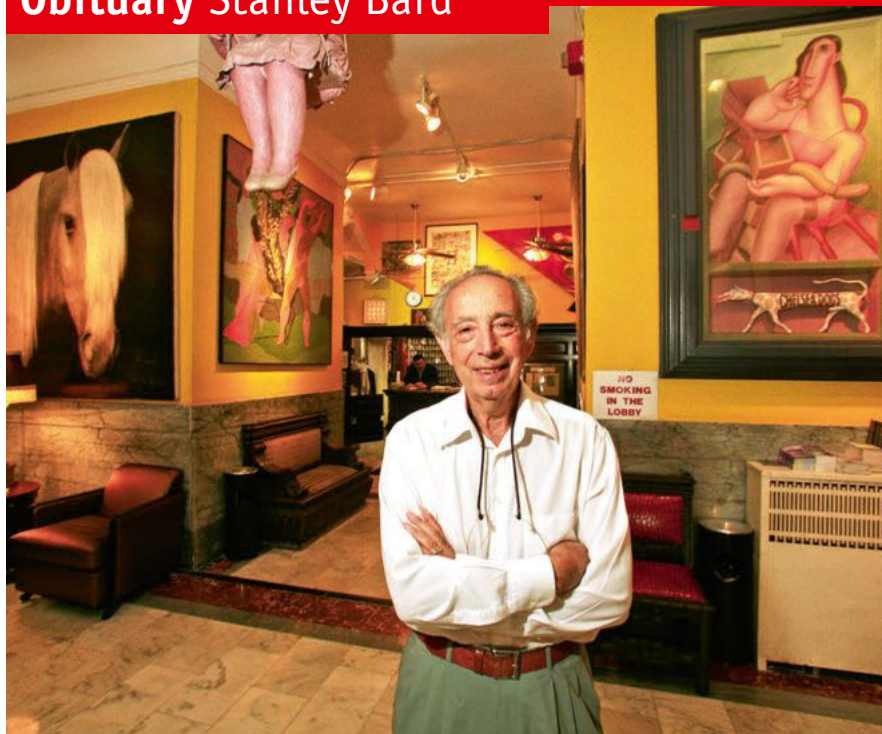
The Economist commodity-price index

2005=100

			% change on	
	Feb 21st	Feb 28th*	one month	one year
Dollar Index				
All Items	148.6	146.7	-1.4	+16.7
Food	158.7	156.4	-2.4	+8.4
Industrials				
All	138.2	136.7	-0.1	+28.4
Nfa¹	145.9	144.1	-3.2	+34.3
Metals	134.9	133.5	+1.3	+25.9
Sterling Index				
All items	216.8	214.4	-0.3	+30.8
Euro Index				
All items	175.4	171.7	+0.3	+19.3
Gold				
\$ per oz	1,234.7	1,256.6	+3.7	+1.9
West Texas Intermediate				
\$ per barrel	54.1	54.0	+2.3	+57.0

Sources: Bloomberg; CME Group; Cotlook; Darmann & Curl; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Thomson Reuters; Urner Barry; WSJ. *Provisional

¹Non-food agriculturals.



Up in the old hotel

Stanley Bard, manager for 43 years of New York's Hotel Chelsea, died on February 14th, aged 82

IT IS a fair bet that no hotelier in New York was prouder of his trade than Stanley Bard. For him, it was a strange and wonderful calling, and what he made of his red-brick empire was something beautiful.

His Hotel Chelsea—the inverted name conferring a certain elegance—sits on West 23rd Street in Manhattan, between Seventh and Eighth Avenues. Mr Bard believed firmly that the area was named after his building, which was once the tallest around, and is on several historic registers. Its style is Victorian Gothic, with floreate cast-iron balconies, and it rises to 12 storeys of somewhat gloomy aspect. It contains, according to most city guides, 250 rooms, though Stanley—as everyone knew him—averred there were around 400. He liked to say that if it were divided up today, without the same regard for high ceilings, outsize rooms and marble fireplaces common in 1883, you could fit in at least 1,000.

The lobby of the Chelsea, which rises to a wide dank staircase, housed his art collection, including several fleshy nudes, flying papier-mâché figures, a portrait of a horse and a plaster-of-Paris pink girl on a swing. Below these, most days, milled a crowd of exotic, addled or entranced human beings. Stanley liked to preside on the reception desk. He was a short, smooth-skinned man, who combined energetic ex-

aggeration with a mysterious vagueness. When he answered the telephone, his native Bronx would give way to the tones of an English butler. Callers were made to realise that this was a special hotel.

Apart from tourists, whom Stanley admitted on sufferance and charged more, most guests were struggling artists or writers, and two-thirds were long-term residents. The arrangement was highly unusual for New York. In the 1970s the monthly rate was \$60: very reasonable, Stanley thought, for the city. Nonetheless he sometimes let tenants off their rent, or lent them money for food. The average stay was nine years. Virgil Thomson, the composer, stayed for 50. Artists came to paint and sculpt, writers to write, deadbeats to die, and a large share to drink and misbehave.

From 1964 all were vetted first by Stanley, who considered whether they and the hotel could get along. He let in, among others, Jack Kerouac, Allen Ginsberg, William Burroughs, Jackson Pollock, Leonard Cohen, Janis Joplin, Stanley Kubrick, Jimi Hendrix, Tom Wolfe, Jean-Paul Sartre, the Grateful Dead and all the women associated with Andy Warhol's Factory. Bob Dylan wrote songs in Suite 211, Madonna filmed her sex book in Room 822, and Woody Allen shot three films on the murky marble stairs. Short-stays were sometimes billet-

ted with the famous, separated by a bead curtain and on sagging camp beds.

Stanley's theory of management was that all tenants, whom he viewed as friends, should be largely left alone. They could change the furniture, put up antique wallpaper, plant palms, sleep in their coffins and keep any sort of child or pet. Privacy was paramount. Housekeeping happened once a week, if that. Arthur Miller, recuperating here from his marriage to Marilyn Monroe, objected to the lack of vacuuming and the disintegration of his carpets, at which Stanley expressed great surprise. He thought the suite "perfect".

He also believed that guests could do what they liked, as long as they did not destroy his hotel. The very thick soundproofing in the walls, and decent insulation, meant that although some rooms were set on fire, it never took hold. When anyone mentioned the deaths in the hotel, he put these to one side. Dylan Thomas was ill at the Chelsea, he admitted, having drunk 18 straight whiskies; but he drank them elsewhere, and died in the hospital. Sid Vicious's girlfriend Nancy Spungen died of stab wounds in their room, but Stanley saw this as a suicide pact that went wrong, which was the sort of thing creative people did. Some guests threw themselves, stoned, down the stairwell, on the same artistic principle. Any police seen in the hotel were, in fact, more guests. Unexplained disappearances were probably vacations. His hotel was so serene, bathed with perfect northern light, that people either returned again and again, or never left.

Heart and soul

He did not live in the hotel himself. From the mid-1990s he owned an apartment on tonier Park Avenue. Nonetheless the hotel was also a family home. His father had bought it, with two other Hungarian Jews, after the war, with a loan from the Emigrant Bank next door. It was then a flophouse, having fallen from its pinnacle at the centre of the then-Theatre District; the area has since come up again. Stanley's boyish adventures involved exploring behind the walls with the hotel plumber, and riding up and down all day with a tolerant bell-captain in the ancient gated elevators.

Since his hotel had heart and soul, it had no business plan—beyond fostering a community of unfettered, energised, even wild artists in the heart of New York City. In this he succeeded wonderfully, but not commercially. In 2007 he was shoved aside by the board. His beloved hotel is being redeveloped; a few nervous tenants remain in their dusty rooms. At his last tenants' association meeting at El Quijote, his favourite restaurant, it seemed that the light had gone out of his eyes. He was mourning the loss of beauty that he had spent his life creating. ■